UMASS/AMHERST
312066 0333 3137 8

UNIVERSITY OF MASSACHUSETTS
LIBRARY

LIBRARY
UNIVERSITY OF
MASSACHUSETTS
AMHERST, MASS.

634485

THE AMERICAN FLORIST

A WEEKLY JOURNAL FOR THE TRADE

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, FEBRUARY 9, 1893.** **No. 245**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company.
Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,

322 Dearborn Street, CHICAGO.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis, Mo., August 9 to 12, 1893.

CONTENTS.

Sweet peas 669
Alocasias 670
Group of primula plants (illus) 671
Miscellaneous seasonable hints 672
Carnations—Seasonable hints 672
—Temperature for carnations 672
—Seven new carnations 673
—House of carnations (illus) 673
—Chester County Carnation Society 673
Roses—Climbers and remontants 674
—The brown scale on roses (with 3 illus) . . . 674
—Number of blooms cut 674
Washington 675
New York 676
Philadelphia 676
Chicago 677
St. Louis 677
Boston 677
Baltimore 677
Indianapolis 677
Buffalo 678
Toronto 678
Obituary—Wm. D. Brackenridge 678
Violets 678
A great horticultural event 680
The seed trade 682
Catalogues received 682
News notes 682
Violets 684
Packing ice with flowers 686
Mulching roses 686
Potting primulas 686
Heating with hard wood 686
The Florists' Hail Association 688
Locomotive boiler for heating 690

DETROIT, MICH.—A handsome luncheon decoration recently arranged by S. Taplin, consisted of Cœlogyne cristata, alba magnifica primroses and adiantum, the favors being small baskets filled with the same flowers. The arrangement was much admired.

WE ARE glad to be able to advise those of our subscribers whose letters to us have recently been stolen from the mails that the thief has been discovered and arrested. He was a clerk in the sorting department of the Chicago postoffice.

DO YOU WANT a list of the leading cemetery superintendents? You will find such a list in our new trade directory and reference book.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

A Standard List of Sweet Peas for 1893, With Descriptions and Synonyms.

The largest seedhouses in this country are now handling tons of the commoner varieties of this flower, and Eckford's new and improved varieties are becoming justly popular. With rare exceptions our seedsmen are respecting their correct names. Here and there a house on the outskirts of the trade does not seem to have found out that sixty varieties of sweet peas have been christened with names to which they have as sacred right as the standard varieties of any popular flower. Mr. Eckford has been working seventeen years on the sweet pea, and is now bringing out his novelties every year, and has the Royal Horticultural Society's special award and certificate on seventeen out of his forty-two varieties. A reliable seed house will not tamper with his list. And we must go to the English trade list for the true names of the other twenty or more varieties. Up to this year only one American variety of real merit has been recognized by the trade. The Miss Blanche Ferry is now given a place on the English lists in token of its merit. A half dozen of the old varieties have always been sold simply under their descriptive names, and nobody on this side the water has any right to sell them under any fanciful names. The black, white, light blue and purple, purple brown, etc., have never received any authoritative christening beyond that. The term "invincible" is sometimes added to indicate a specially good strain, but that does not make a new variety.

Probably no flower comes truer than the sweet pea. The Fairy Queen, for instance is a variety. It comes as true as the morning sun. It is a white flower with just the most delicate lines of carmine on the standard. It is always just so. On the other hand the striped varieties both in scarlet and purple are shifting continually. The Queen of the Isles, supposed to have a scarlet ground and white stripes, will cross over into the scarlet striped, which properly has a white ground and scarlet stripes. The purple striped varieties will shift all the way from solid purple and dark maroon to the most delicate lavender and crimson stripes. Even Eckford's purple and blue striped varieties, such as the Senator and Princess of Wales, shift into solid blues and purples. Still a sufficiently large percentage of these come true to establish their variety names. It is however remarkable how the great majority of the varieties take and hold a distinct type.

It is very difficult to hybridize the sweet pea, because the fertilizing organs are closed in a sac, and each flower sheds its pollen when about half open. Mr. Eckford worked seven years on them before he got any result. Take the white sweet pea. Our seedsmen are likely to put forth premature claims on improved whites. There are two distinct whites, one with a white seed, and one with a black seed. All the so called improved American white are white seeded. With high culture they will show improvement in size perhaps, but they are all of the old form, and also lack the substance of the black seeded white. For real merit let us fairly compare the best white seeded variety with the Mrs. Sankey and the latter walks off easily with the honors. The only trouble is the latter is too high priced, and must be bought in reliable packages. It will be a real boon if the 1893 season shows up a white seeded white that will hold its improved size under ordinary culture. It must be borne in mind that a plump seed does not warrant a large blossom.

Now as to a standard list of varieties, I believe the following to be complete and correct to date. Mr. Eckford's original varieties compose the bulk of the list, and his own description, somewhat shortened, will be given. The writer has found the true Eckford's to be very reliable, although they are by no means equal in merit. And it should be borne in mind that some of his varieties are of the old form, and as fast as he carries them up to the new, expanded form; he re-christens them. One might plant his Mrs. Eckford side by side with the Primrose and ask where the difference is. Quite similar in color, but supposed to be different in form and size, such a percentage of the former may revert to the latter as to call in question their difference. So of the Princess Victoria and Duchess of Edinburg. But by acclimating them, and by skillful culture, I believe we shall hail with delight the large, expanded form he has put on them in England. Then, too another occasional annoyance in this expensive and high bred seed is its failure to germinate, and its possibility of reverting. Seed which the writer carefully saved from the beautiful lilac Countess of Radnor came the pink Mrs. Gladstone. This is probably one of the incidents of high hybridizing, and only happens often enough to be interesting.

In the following list those marked A. M. have received an award of merit from the Royal Horticultural Society of England; those marked 1st certificate have received a first-class certificate from the R. H. S. Those followed by (1893) are novelties of the present year. The others the writer has had under cultivation, Eckfords varieties are indicated by a *.

Adonis. Rosy pink. Small, but good.

Alba Magnifica. Probably more in the name than in the strain.

*Apple Blossom. Standard, shaded pinkish rose. Large, well named.

Black (Invincible Black, Bronze Prince).

Blanche Ferry (Blushing Bride). Fine pink and white. Brighter than Painted Lady. A new American variety.

Blue Edged. Apt to be mixed with Butterfly.

*Blushing Beauty (1893). Soft pink, suffused with lilac; a superb flower.

*Boreatton. Fine deep maroon self.

Butterfly. White, laced and shaded with lilac.

*Cardinal. Intense crimson scarlet. Quite distinct from and superior to the common scarlet and carmine of the trade.

Capt. Clarke (Tricolor). White, standards pencilled with carmine, and wings edged with blue.

*Capt. of the Blues. First class certificate. Standards bright purple blue, with pale blue wings. A noble flower.

Carmine Invincible. Reliable seed gives a distinct variety, but cheap seed about the same as the Scarlet Invincible.

*Countess of Radnor. First class certificate. Pale mauve standards; wings pale lilac. Very fine.

Crown Princess of Prussia (Salmon, flesh color). Light blush shading into buff.

Dark Red. Hardly a fixed variety.

*Delight. Standards white, very softly suffused with crimson. Wings white.

*Dorothy Tennant. A. M. Pucy violet or rosy mauve. Large.

*Duchess of Edinburgh. Scarlet, flushed crimson, frequently with marbled edges.

*Duke of Clarence (1893). Rosy claret self-colored flower, large, very fine.

*Emily Eckford (1893). A superb flower of a well marked cerulean tint, the standards suffused with reddish mauve, closely approaches a true blue; large and of good substance.

*Empress of India. Clear rosy pink standards, and white wings.

Fairy Queen. White, fine lines of carmine on the standard.

*Firefly (1893). A self colored, intense glowing crimson, good size and substance.

*Gaiety (1893). Standards white striped and flaked with bright rosy lilac; the wings delicate blush.

*Her Majesty. Soft rosy pink self, very large and showy.

*Iguea. Fiery crimson-scarlet standards; wings pale scarlet, flushed purple.

*Imperial Blue. Blue, shaded mauve.

*Indigo King. Standards dark maroon purple, wings clear indigo blue.

*Isa Eckford. First class certificate. Creamy white, suffused with rosy pink.

*Lady Beaconsfield (1893). A. M. Salmon standards tinted with rose, the wings pale yellow, very distinct and beautiful.

*Lady Penzance (1893). A. M. Pale but very bright rose, very striking and distinct.

*Lemon Queen. Delicate blush pink standards, tinted with lemon; wings blush, almost white.

Light Blue and Purple.

Lottie Eckford. White, standard suffused with crimson, and wings blue edged. Distinct from Capt. Clark in striking cast and improved form. Not one of Mr. Eckford's.

*Miss Hunt. Pale carmine salmon standards, with soft pink wings.

*Monarch. First class certificate. Bronzy crimson standards, with rich deep blue wings. Very large.

*Mrs. Eckford. A. M. Large, self-colored flower, delicate shaded primrose.

*Mrs. Gladstone. First class certificate. Delicate pink standards; wings blush, edged with delicate pink.

*Mrs. Sankey. First class certificate. Pure white, a fine improvement on all other whites. This has a black seed, while other whites are white seeded. Of largest and finest form.

*Orange Prince. First class certificate. Of well earned fame. When bunched the orange effect is very striking. Bright orange pink.

*Ovid (1893). The standards and wings bright rosy pink margined with rose. A very pleasing flower.

Painted Lady (Nellie Jaynes). Old pink and white.

*Peach Blossom (1893). Salmon pink standards, the wings soft pink.

*Primrose. First class certificate. A near approach to a yellow sweet pea, standards and wings pale primrose yellow.

Princess Beatrice. Rose pink, and of improved form.

*Princess of Wales. First class certificate. Shaded and striped mauve on white ground.

*Princess Victoria. Standards dark cerise, wings mauve pink.

Purple. Rich shade.

Purple and Blue Striped. Not a fixed variety.

Purple Brown. Comes in dark striped form.

*Purple Prince. Maroon standards, shaded with bronze and purple blue wings.

*Queen of England. A white seeded white. Good, but not remarkable.

Queen of the Isles (Invincible red striped). Scarlet ground, white stripes.

*Royal Robe (1893). Delicate pink standards, the wings soft blush pink; an exquisite variety.

Scarlet Invincible. Brilliant scarlet.

Scarlet Striped. White ground, red stripes.

*Senator. First class certificate. Large, bold flower. Shaded and striped chocolate on creamy ground.

Splendid Lilac. The Lottie Eckford with wings shading more into lilac.

*Splendour. First class certificate. Rich bright rose color. A large, superb variety.

*Stanley (1893). A. M. Deep maroon self, large, very handsome, of finest form and substance; a great advance. The *Journal of Horticulture* pronounces this by far the finest dark variety yet seen.

*The Queen. Rosy pink standard, light mauve wings.

*Venus (1893). A. M. Salmon buff, the standards delicately shaded rosy pink, very distinct.

Vesuvius. Standards shading into violet and crimson spotted, wings violet.

Violet Queen (Princess Louise). Rosy pink standards, violet wings.

*Waverly. Rosy claret standards, pale blue wings, shaded rose.

White.

NOTE.—Our seedsmen quite extensively advertise the name Grand Blue. There is no such variety. What is usually meant is Imperial Blue (Eckford). Laxton's Invincible Blue and the Imperial Purple are the same also. Who has the prior claim I do not know. Grand Blue was once applied to Indigo King in England.

The Lord Anson Blue (Lathyrus cacnullus) and the Lathyrus tingitanus (crimson) have a value in a mixed row.

W. T. HUTCHINS.

Indian Orchard, Mass., Jan. 23, 1893.

Key to Page Group of Primula Plants.

1. Magenta flowers, dark foliage.
2. White flower, dark foliage. For individual flower, see No. 16 in page group of single flowers. A characteristic market plant.
3. Semi-double magenta, dark foliage.
4. Original type of Chinese primula. For individual flower see figure 1 in page group of flowers.
5. Blush white.
6. White, flaked with carmine. See figure 8 in page group of flowers.
7. Princess Mary. Ideal market plant. See figure 10 in group of flowers.
8. Punctatissima, marked type. See figure 7 for individual flower.
9. Alba magnifica. Fine large white.
10. Kermesina splendens; bright salmon with dark foliage.
11. Intense deep purplish crimson, with very dark foliage.
12. Semi-double salmon with dark foliage.
13. Intensity. Bright cerise with yellow eye, dark foliage.
14. Swanley Blue. See individual flower figure 15 in page group.
15. Double flesh pink, more fully double than any other figured, and very attractive in color. Figure 7 group of semi-double flowers.
16. Rosette. Double white, flaked with carmine.

Alocasias.

Under this heading are included some of the handsomest of warm house foliage plants, though some of them are unfortunately too tender to be of great value to the average florist. But as exhibition specimens, and in some few instances for decorative purposes, these plants are hard to beat, their leaves having such rich and varied coloring, though generally in subdued tints, and also combining both large size and attractive form.

As intimated above, the alocasias are essentially warm house subjects and also enjoy generous treatment in regard to moisture and space, these being necessary for the full development of the foliage. The soil needed for most of the species and varieties is a light and open mixture consisting largely of rough peat and sphagnum moss, to which may be added a little turfy loam and some dry cow dung, keeping in mind the fact that the mixture should preferably be rough and lumpy rather than fine and friable. The drainage of the pots should also be closely looked after, for while alocasias require abundant watering during the growing season, yet they should not at any time become sodden or the plants will soon suffer, and to avoid this it is well to half fill the pots with drainage material, a mixture of potsherds and charcoal being excellent for this purpose. In potting, the plants should be kept rather high above the rim of the pots and a topdressing of living sphagnum placed on the surface of the soil will add much to the appearance of the plants and also encourage the roots, the latter being usually near the surface of the soil. Some of the species are entirely deciduous, while others are only partially so, but none of the alocasias will grow with the same freedom during the winter that they do in the summer, and it is therefore useless to pot them late in the autumn, for this operation under such circumstances would most likely result in the loss of much of the foliage and simply hasten the period of rest.

Propagation is effected by means of bulblets and side shoots that may readily be removed from the parent plant and treated like young caladiums, to which these plants are allied. And in some instances in which small bulbs are not so freely produced, the stems may be cut into sections, the cut surfaces being dipped into slaked lime to prevent decay, and then placed in sand in a warm house where they will soon emit roots and start into growth.

Alocasias in general are not specially

GROUP OF PALMATE LEAVED CHINESE PRIMULAS NOW IN BLOOM AT THE WORLD'S FAIR.

SEE KEY ON OPPOSITE PAGE.

liable to the attacks of the common insect pests, the most likely to trouble them being red spiders and thrips, both of which are readily prevented by careful syringing and proper attention to the atmospheric conditions of the house in which they are grown. Among the stronger growing species, A. cuprea, otherwise known as A. metallica, the leaves of which are frequently more than one foot in length, rich bronze above and purplish beneath, is notably good, and another of somewhat similar character and also remarkably handsome is A. Sedenii, a hybrid variety of which the above is one of the parents. A. Sedenii has narrower leaves than A. cuprea, the ground color of which is bronzy green, but having the additional characteristics of whitish veins, and being of decidedly free growth soon makes a handsome specimen. A. macrorhiza variegata is one of the most striking of this genus, being of very strong growth, the leaves of a good specimen often attaining a length of two feet and broad in proportion, dark green with large blotches and marblings of pure white, the variegation also extending to the footstalks. This variety can be readily propagated and small plants can be used with charming effect in a dinner table or mantel decoration. A. Thibautiana is another handsome species, the leaves of which are more sagittate in form, grayish green in color, with the veins of a lighter shade, the under side being purple. Still another of the large leaved species is A. Sanderiana, the foliage of which is slate color, with the ribs and margin very distinctly marked with white, while the leaves are deeply sinuated around the edges, giving them a very peculiar appearance. A. Lowii and A. Veitchii are also noteworthy sorts, having slender footstalks and long, graceful leaves, those of the former being more clearly marked on the veins with white than are the leaves of A. Veitchii, and the plants being somewhat weaker in growth.

A. Jenningsii and A. Marshallii are a useful pair, being comparatively dwarf in habit and very easy to increase and to cultivate. The leaves of A. Jenningsii are small, bright green in color, with a series of dark blotches on either side of the midrib, while those of A. Marshallii are of similar outline and marking, with the additional characteristic of a broad whitish band down the center of each leaf. Either of these two varieties may be grown into a pretty specimen by planting a number of the bulbs in a pan, and they are also of value in three or four inch pots for decorative work. The few species and varieties to which reference has here been made do not by any means exhaust this genus, but may serve to point out a few distinct types to some who are not familiar with them. W. H. TAPLIN.

Miscellaneous Seasonable Hints.

Sow petunia seed at once. They will then be in bloom when you want to use them. Unless you want some particular single strain, sow only the best double, you will get 50 per cent. single any way. The petunia has a very small seed, and needs only the slightest covering, just sufficient to cover the seeds is enough. The soil in flat or pan you sow in should have been well watered before sowing; then a very slight sprinkling is enough, which does not wash the seeds about. I cover the pans with a thin cloth and keep it continually moist till the seeds germinate, then remove it. I find this a good plan with all very fine seeds.

Those who want to raise gloxinia and tuberous begonias from seed should sow now. The one year old bulbs of fine varieties of these popular plants are now sold so cheaply that I believe it is better for the general grower to leave the raising of seedlings to specialists and purchase the bulbs. If you want some tuberous begonias in bloom by middle of May, start a few bulbs now, but it is too early for the general crop. Start in a temperature of 55°, and very little water is needed till leaf growth begins.

This is a good time to propagate cytisus. The young, tender shoots root as easily as a verbena. There is always a good demand for lemon verbena (aloysia). You should have had a few plants grown in pots last summer, and stored away in a cool house or under a bench. If you have them, get them up at once into a warm house, shorten back the old shoots, keep them watered and syringed, and you will soon have a crop of cuttings which root readily.

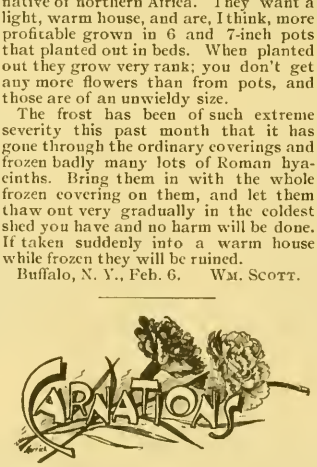
What did you do with the poinsettas that were unsold after New Years? They should be now resting on their sides under the dryest and warmest bench you have, and leave them there till April 1.

I notice several lots of Spiræa Japonica that will want to be hurried along for Easter. Keep them in the light and warm, and water twice a day. If you have occasion to fumigate the house they are in, be sure to cover them thoroughly with cloth or paper. Tobacco smoke will ruin the young growths.

Don't keep your callas in a cool house and expect them to be profitable. Some people forget they are a tropical plant, a native of northern Africa. They want a light, warm house, and are, I think, more profitable grown in 6 and 7-inch pots that planted out in beds. When planted out they grow very rank; you don't get any more flowers than from pots, and those are of an unwieldy size.

The frost has been of such extreme severity this past month that it has gone through the ordinary coverings and frozen badly many lots of Roman hyacinths. Bring them in with the whole frozen covering on them, and let them thaw out very gradually in the coldest shed you have and no harm will be done. If taken suddenly into a warm house while frozen they will be ruined.

Buffalo, N. Y., Feb. 6. WM. SCOTT.



Seasonable Hints.

The arctic wave referred to in our last week's article has given place to a January thaw. Within 48 hours the weather changed from a genuine Canada winter to spring-like temperature. The highest and lowest indications (in the shade) for the last few days are as follows: 25th, 33° to 42°; 26th, 18° to 42°; 27th, 26° to 40°; 28th, 34° to 40°; 29th, 35° to 38°; 30th, 34° to 38°. It is these sudden changes of our climate that test the judgment and experience of the florist, and affect the temper and patience of the fireman. We are now bothered not so much to keep warm as to keep cool, and the fires going at the same time. For we are just as liable to suddenly have a change to colder conditions again, and we must be alert to any contingency. The idea is to maintain as steady a temperature inside as possible, let the weather outside be what it may. If we are running along with a night temperature of 55° to 60° and permit the houses to drop to 40° or below the result would be certainly injurious. It would be equally detrimental to permit them to rise to 60° or over if we had been in the habit of carrying them at 40°.

During such (comparatively) warm spells as the present the houses will drop to 60° between 4 and 5 o'clock p. m. when the fires are started and allowed to run but a short time. The furnaces are shut up at about 6 o'clock and are not seen to again till 7 the next morning, when they are shut off or banked for the day. The mercury will stand at 55° to 60° during the night and will begin to rise on the appearance of the sun. In the morning we now commence to ventilate early, giving a little air at first, but letting the houses run up to 80° or 90°, with plenty of ventilation during the hotter part of the day, shutting up early and not too suddenly. The requisite amount of moisture is still kept up by means already alluded to, but not so much is required as when the fires are running harder. This is the routine of a clear day. Should the day be cloudy we try to keep temperature down to 60° or 65° and ventilate if necessary to do so.

We have been thus particular to state details of our own management during two extremes of winter weather, but it is only the general principles that apply to others circumstanced and situated, it may be, differently. W. R. SHELMIRE.

Avondale, Pa.

Temperature for Carnations.

Being much interested in various communications on this subject recently printed in the FLORIST I desire to add a little of my experience.

In 1890 part of a solid bench was planted with Portia in a house that contained Silver Spray, the night temperature being about 45°. The Silver Spray grew and bloomed profusely, while Portia grew very slowly, and did not average five blooms to a plant until the warm weather set in in the spring.

In 1891 the same house was planted with Mrs. Fisher in the solid bench, and a few Portia were planted on a raised bench on the other side of the house, the Fisher doing well, and Portia as before, the temperature being the same (45°). Last fall, being about disgusted with Portia we tried fifty plants on a raised bench of a house where the temperature is kept at 55° to 60°, and what a difference! They grew very strong, and have given more blooms than any other variety we grow.

While some growers don't believe in syringing I believe it to be beneficial. I don't believe in syringing in cloudy weather, unless it is warm enough out of doors to allow a full current of air to circulate through the plants. This would not apply, however, to greenhouses that were high and wide, with ventilators at the ridges. We always syringe in the morning, and would rather it would be a sunshiny day that the plants may dry before 2 o'clock in the afternoon.

I agree with Mr. W. R. Shelmire that young plants give the best results, and would always strike cuttings late if possible. Mr. Shelmire asks if this is merely a matter of treatment, or is there any philosophical reason for it. Now, I don't claim to be a philosopher, but I have a

Mme. Diaz Albertini. *Mrs. F. Reynolds at far end of house.* *Richmond.*

South. MR. F. DORNER'S SHORT-SPAN-TO-THE-SOUTH CARNATION HOUSE. *North.*

few reasons why I think early struck cuttings are not as good. Take for instance the chrysanthemums; if cuttings are struck early and the wood allowed to become hardened you will notice that when planted out they are slow in starting into growth, and in the fall, when blooming time comes they are not as good as plants grown from late struck cuttings that were not allowed to become hard; neither do they give as many or as large flowers. Isn't there something in this that should be brought out more to an understanding?

G. LESTER HOLLIS.

So. Weymouth, Mass.

Seven New Carnations.

A box of carnation blooms, grown by Peter Herb, Mount Healthy, Ohio, were recently received at this office. They presented widely varying types in form and color; some appeared to be established sorts, while others looked as if grown on seedlings in their first year. All were named sorts.

An immense crimson flower, Geo. W. Jackson, attracted attention by its size. The smallest of the blooms was 3 inches across—the largest 4¼ inches. But it resembled in shape those monsters so often seen on young seedling plants; it was loose and irregular, with a short bursting calyx. The color was very good, a bright glowing crimson, and it was very fragrant, but the calyx must be improved before it is of any value. Another large flower was Peter Herb, rose pink striped with carmine, but this too possessed a poor calyx; the stems were good. Edith Kirk was a delicate salmon, shading to a deeper color at the edges of the petals; stem and calyx good, but flower too small. Another delicate color was Maiden Blush, creamy white, shading to delicate salmon in the heart of the flower; calyx good, appears disposed to bloom in sprays. Marble was the name given to a white, marbled or colored with faint carmine. The flower is very well shaped, medium size, good calyx, and fine stem. It appeared to us the most promising flower in the group.

White was represented by two varieties in this group; Alice Forder, very double, pure white, but disposed to burst, and Katie Herb, a fringed white with long firm calyx. The flower was rather thin, but it is apparently a good keeper, being as fresh as if still on the plant.

Chester County Carnation Society.

The February meeting was held Saturday, February 4, at the room of the W. C. T. U., Kennett Square, Pa.

The committee on gold medal for best seedling exhibit at Pittsburg reported the medal purchased and that it would be carried to Pittsburg for disposition. On motion of E. Swayne the society adopted the following resolution: Resolved, that W. R. Shelmire be accredited with the best exhibition of yellow and yellow-variegated seedling carnations. The occasion for this being a show of seedlings mainly the offspring of Cæsar, one a light yellow marked like Buttercup, much larger, fuller and more deeply fringed than that variety, another a pure, bright yellow, large and well formed.

The question of low prices recently ruling in the flower market was well discussed. It was thought the main trouble was lessened demand usually following the holidays.

Edward Swayne reported correspondence with sons of the late A. Cook, of Baltimore, Md., stating that their stock of Buttercup carnation was originated from one plant got of Mr. Starr several years ago and since then increased by seed produced by cross-fertilization of Buttercup flowers, which is claimed comes true to the parent type.

Mr. Davis introduced the subject of production of heat by combustion of gasoline and instanced cases where it was used for other than greenhouse purposes. Mr. Larkin had investigated the burning of crude oil for greenhouse heating and found while it might be feasible the odor arising was so powerful as to force the abandonment of the enterprise. The general opinion was that if it could be applied practically it would save much labor and anxiety.

Mr. Shelmire in showing his seedling exhibit said that he found his bench of seedlings from Cæsar had been profitable for cut flowers, all having proven double and marketable.

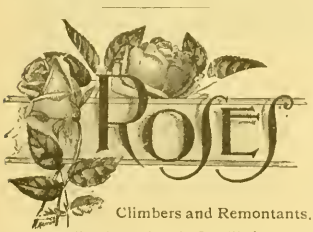
A committee was appointed to arrange

an exhibit of cut flowers to show at the Pittsburg meeting of the American Carnation Society, independent of individual exhibits. President Ladley was elected a delegate from the society to the Pittsburg meeting.

A number of exhibits of seedling flowers were shown by Messrs. Passmore, Larkin, Pennock and Shelmire, several of which were of unusual promise. It was decided to hold the March meeting in West Chester and to make a display of flowers in connection therewith. C. J.

THE American Carnation Society has issued an announcement extending the coming meeting at Pittsburg to two days (February 21 and 22). The headquarters will be at Hotel Schlosser, corner of Sixth street and Penn avenue. The first day will be devoted mainly to the exhibit of flowers. Flowers for exhibition should be shipped by prepaid express to R. C. Patterson, corner Market and Liberty streets, Pittsburg, Pa. The Chester County (Penna.) Carnation Society offers a gold medal for best new variety, never offered for sale, six blooms to be shown.

WE HAVE RECEIVED from Walter Wilshire, of Montreal, some carnation blooms, a sport from Garfield, in color a clear light pink, similar to Wm. Scott. Mr. Wilshire tells us the sport first appeared three years ago, being this light pink. The second year the color of the sport was carmine rose, but this year it appears as two distinct sports, carmine rose and delicate pink. Habit just the same as Garfield, but with the addition of a good clove scent.



Climbers and Remontants.

I am obliged to Mr. F. J. Ulbricht for his answer to my enquiry concerning remontant roses in your issue of December 15th, but as he fails to notice my question fully I would thank you for a little more space concerning the matter, and ask again, what constitutes a hybrid remontant rose from one that is remontant originally? I did not think that Anna de Diesbach or Magna Charta, could be classed among them, and still less Ulrich Brunner. The two former seem to me to belong to the Noisettes, as they grow rank and are capable of climbing, and, moreover, of living through rather severe weather out of doors, and maintaining the habit of a so called climbing rose. I have seen them as such giving an abundance of rare blossoms in the spring time and early summer, only not as a remontant does when under glass. Together with these have grown the Gloire de Dijon and Marechal Neil and I believe, these same plants can still be seen, though it is many years since I had an opportunity of visiting the place. Of late years the process of hybridizing roses has brought about such wonderful developments that I look in vain for the old landmarks to guide my judgment as to what class our new roses can belong. The Gloire de Dijon and Marechal Neil, Mme. Deslongchamps and many others of the Noisettes are as much climbers as Baltimore Belle, Queen of the Prairie, and others of that class, though I admit that both Marechal Neil and Dijon are more fitted in my judgment to be termed remontant than Diesbach or Magna Charta for the simple reason I have cut roses very late from them out of doors (in 1866, I think it was) as late as Christmas. This was about 25 miles from London, and they were as climbing plants. I have, however, grown these same sorts as standards and as budded from the roots with Diesbach and Magna Charta side by side, only I could not under these conditions look upon them as perpetuals or remontants, seeing they gave off their blossom in one season, lasting about a month. I would like to say that in my opinion the name both remontant and climbing, is a far-fetched name to apply to roses. In the first place, perpetuals, hybrid perpetuals, teas, hybrid teas, cannot be understood to differ from the Noisettes or Bourbons, unless, indeed, you apply that difference to certain localities only. The Bengals too, are in places in this country hard to fit in, as a different class of rose. Comte de Rohan, Bosanquet, Agrippina, and others surely are as much remontant as Diesbach or Magna Charta, when grown outside naturally. Now we have roses of American Beauty type, Perles des Jardins, Brides, Mermets, Woottons, Bennetts, Goutiers and others of a higher order, more delicate, wanting more careful attention in their culture and difference in climate or atmospheric influence, and with all this new and better order of things, I get puzzled, and far away at sea in attempting to do justice and right to her majesty, Queen of Flowers.

As regards a climbing rose, I long ago came to the conclusion there was no such thing. I never saw one yet twine or put out a tendril, or hook its way up by its leaves as a clematis does, neither by throwing out tentacles and cement or gum to hold its way. On the contrary it will grow strong and stiff, thus being able to support itself as any other tree to a certain height; then it must be supported with trellis or fastened with nails. A peach tree, apricot or cherry are as much climbers as the rose, for they can all be grown in the self-same way.

ENQUIRER.

The Brown or Soft Orange Scale (Lecanium Hesperidum, Linn.) on Roses.

BY F. M. WEBSTER.

This scale is an almost universal pest in greenhouses, and has recently been found to seriously injure roses in Ohio, but was almost entirely overcome by the interesting little parasite *Encyrtus flavus* Howard, the female of which is shown in Fig. 1 and the male in Fig. 2, while the scale itself is shown in Fig. 3.

This scale is not only generally distributed throughout the United States, but is found also in England, Europe, Asia, Africa and Australia. It was described by Linnaeus in 1735 in his Fauna Suecica and in his System of Nature he states that it "infests various evergreen and greenhouse plants." In Europe it is more especially abundant on the orange and ivy. In South Africa, according to Miss Ormerod, it is known as the "Broad Scale," and is said by Prof. P. MacOwan, of Cape Town, to seriously affect the orange trees. In Australia, it is said by Mr. Tryon, of Brisbane, to be very common on garden shrubs. Its injury in Asia is recorded by the late Mr. E. T. Atkinson in the Journal of the Asiatic Society of Bengal. In New Zealand, Mr. W. M. Maskell says it is the commonest species of the genus in that country, being found everywhere on ivy, holly, camellia, orange, laurel, myrtle, box and many other plants, both out of doors and in greenhouses. The female is thus briefly but clearly described by Mr. Maskell:

"Adult female naked; yellow, brown or reddish; flat or slightly convex; elongated; skin smooth, sparsely punctate; length averaging one-tenth inch, but specimens reach sometimes one-fifth inch. Antennæ of seven joints; a few hairs on most, but the seventh has several. Abdominal cleft and lobes normal. Feet normal. On the edge of the body a row of small hairs, not set closely together. Viviparous; at gestation the under side becomes concave, forming a shelter for the young; and this cavity is often of a blood red color. On the underside may be seen sometimes four cottony trails starting from the region of the four stigmata. Young larva reddish brown; oval, flat; antennæ of six joints. From the abdominal lobes spring two long setæ."

The male is very minute, devoid of both eyes and wings, but possessing antennæ and legs. In no stage of its development is it found except within the body of the mother, and, therefore, pairing must take place before the birth of the young females. This lack of eyes clearly proves the error of Matthew Cooke, who supposed that he had discovered this sex in 1880 (see Inj. Ins. of Orchard and Vineyard, pp. 164, 165), and the discovery therefore belongs to Monsieur Monies, who published his discovery and descriptions of the various stages of development in Comptes Rendus des Seances de l' Academie Francaise, February 14, 1887.

The scale has, in this country, several minute parasites, *Coccophagus cognatus*, How., *C. vividus*, How., *C. flavoscutellum*, Ashm., *C. lecanii*, Fitch, *Trichogramma flavum*, Ashm., and *Encyrtus flavus*, Howard. The last of these parasites was described twelve years ago, from specimens received from California, and had not, up to the time of my rearing it at Columbus, Ohio, last spring, been observed outside of that state. If it is as effective in its work of suppression of the scale in all cases as it was under my observation, it is to be commended to the fostering care of florists and others throughout the world. To the entomologist it will prove an object of interest, and if, as appears to be the case, it has now started forth in the path of its host it will be an exceedingly interesting matter to note its travels and record its appearance in the various countries through which it finds its way. As copies of this notice will be distributed to entomologists in the countries where the host scale occurs, it is to be hoped that, on the appearance of the parasite, they will see that the fact is duly recorded, and where it will find its way to our American entomological literature.

Ohio Agricultural Experiment Station, Wooster, Ohio, U. S. A.

Number of Blooms Cut.

What is a fair average cut per plant for Brides and Mermets from November 1 to April 1?

Is salt a good thing with which to top dress smilax? SUBSCRIBER.

PLEASE WRITE on your printed letter head when addressing our advertisers. If you have no printed letter head, then enclose your business card or bill head.

Fig. 1.

Fig. 2.

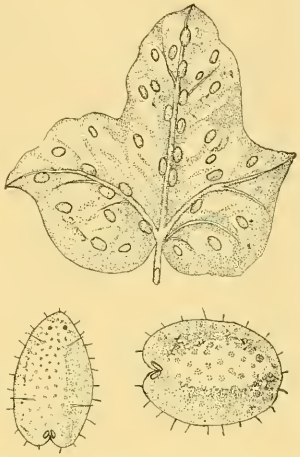


Fig. 3. Lecanium hesperidum, on leaf of ivy. The lower figure at left showing ventral aspect of female of second stage, that on the right the dorsal aspect of adult female. After Maskell.

Washington.

One of the notable events in society thus far this winter was the debut of Miss Morton, the daughter of the Vice-President. The debutante wore a gown of pink satin and tulle, with clusters of rose buds on the shoulders. The decorations throughout were pink. The doorways were curtained with portieres of asparagus studded with bunches of pink roses. Roses were in the greatest profusion at every turn, banking the mantels, garlanding the stairway. The chandeliers were wreathed with smilax from which were suspended balls of roses, filling the drawing rooms with their delicate perfume from every direction. Gold and crystal vases of roses filled every available space. In the great square entrance hallway the corners and niches were filled in with palms and ferns which rustled with every breath of air far above the heads of the guests. The decorations were elaborate and artistic and were a credit to Mr. Bolgiano, one of our young florists.

Another very fine decoration was that of Mrs. James L. Barber's dinner to Prince Leopold Von Isenburg Berstin, of Austria. In compliment to the guest of honor the decorations throughout and the various covers carried out the idea, as far as possible, of the Prince's colors, white and black. The mantels were banked with Maidenhair ferns and white roses. In the dining room the buffet in the recess window was banked with ferns in variety, while at the sides tall palms were grouped, reaching the ceiling. At the end of the hallway a company of musicians played on mandolins and guitars throughout the progress of the dinner, and the doorways leading from the end of the hallway into the second drawing and dining room were filled with tall palms which completely screened the players.

In the middle of the large round table was a center-piece four feet in circumference composed of adiantum fronds studded with long stemmed Puritan roses. Here and there among the ferns were dainty little white sleighs filled with valley tied with white ribbon, on one end of which was the date of the entertainment in gold letters. These were for the ladies, while the gentlemen wore boutonnieres of lily of the valley. Ribbon of white and black tied the bread. Game were served in the form of ducklings with black heads and wings and white bodies. Punch was served in dainty slippers, and ices in the form of chocolate sleighs heaped with snowballs were then served. The table was lighted with small silver lamps under white silk shades to which were hung clusters of lily of the valley. The entire decorations were handsome and a credit to the florist who arranged them. The cards were square heavy card-board with gold beveled edges and ornamented with the name of the guest and date in gold. Painted in water colors at the top were the Austrian and American flags crossed.

One of the most unique wedding decorations of the season was that of Miss Edith Norris, which was in reality a Roman hyacinth and asparagus decoration. The canopy, which was very large, was composed of Asparagus plumosus, with a chime of three bells of Romans, hyacinths, carnations and lily of the valley suspended from it. The mantels were banked with Romans and valley, with a ground of plumosus, and a few sprays of the same lightly covering the flowers adding grace and elegance. The spacious doorways were curtained with portieres of plumosus, studded with Romans and valley. The orchestra was screened by plumosus curtains and banks of Pandanus Veitchii which was the only plant used in the decoration; they were grouped throughout the house wherever plants could be used, producing a fine effect. The bride's bouquet was of Bride roses and valley. The maid of honor carried a bouquet of White La France, as did the five maids of honor. The decorations did credit to C. Strauss & Co., who had the contract.

Senator Hawley of Connecticut, who was recently re-elected, was greatly and agreeably surprised when entering the Senate Chamber on the morning of January 19th to find that Connecticut friends at the Capital, had placed upon his desk a very handsome flower design in the shape of Scales of Justice which was three feet high. The standard and arms were of solid Mme. Guillot roses, while the scales were of Perles with a sword at one side and book marked "Civil Record" in the other, a the shaft being festooned or draped with a silk flag of the U. S. It was beyond doubt one of the handsomest designs ever placed upon any Senator's desk; it was an artistic piece of work in every sense of the word.

At a dinner given in honor of Senator and Mrs. Brice of Ohio a few days ago, orchids were used almost exclusively for decorating. The center piece was large and very handsome, composed of Cattleya Trianæ and spikes of large mignonette, resting on an oval base of Adiantum Farleyense. The corsage bouquets were large and of the same flowers, while the gentlemen were decorated with Dendrobium nobile and mignonette. Senator and Mrs. Brice have taken the lead in society this season, and have adopted the American Beauty as their rose for all their decorations this winter. They propose giving a number of entertainments before the season closes for Lent. They occupy the large and handsome residence of the late W. W. Cochran, which they have had specially fitted up with a view to entertaining. Messrs. J. H. Small & Sons have decorated for them several times this season, in their usual artistic manner, and have a number of other orders on their book for them.

The extreme cold weather during January seemed to have affected even the flower buyers, as most of the stores complain of slow sales since the holidays, in fact trade has been quite dull with all the florists.

Flowers are, generally speaking, very good and plentiful. Roses are very fair, carnations excellent and abundant. Romans are particularly fine and find ready sale. One grower says he has forced 75,000 this season and lost none. Violets are very scarce, rather poor, and very high. Valley is plentiful, quality medium. Harrisii is getting a good foothold, but sales are slow. Callas are rather scarce, small, and in substance poor. Freesia is fine in quality and not over abundant, price fair. Dutch hyacinths are scarce. Daffodils are to be seen in a few of the store windows; they are rather small and sell easily at $1.00 per dozen.

Our florists have lost quite a number of decorative plants during the five weeks cold spell, having had them frozen in transportation. Palms and rubbers seemed to have suffered most.

Mr. N. Studer, of Anacostia, D. C., had his water tanks burned a few weeks ago. The fire resulted from an attempt to thaw out the supply pipes leading to his greenhouse. Kerosene being used to make the fire, caught to the wooden tanks, and before the fire department could render any service, beyond using buckets, (owing to the great distance to fire plugs) they were destroyed. Mr. Studer's loss is about $500.

The contract for decorating the inaugural ball room has been awarded to Messrs. J. H. Small & Sons. The entire decoration is to cost $8,000. Messrs. Smalls' proposal was not the lowest, but

on the contrary, I am informed was the highest. The design submitted with their proposals I am told was by far the most unique, therefore it was adopted; Mr. Henry Small has entered into this work with heart and soul and proposes to show to the country that the florists of Washington are capable of producing as fine, if not finer decorations than any who have yet decorated for the inaugural ball room. It is to be both grand and artistic this time, and Mr. Small is fully equal to the task.

Our florists have had many calls this season for fine funeral designs. The first great demand for funeral flowers was for Mrs. Harrison's funeral; the last that of James G. Blaine, at whose funeral there was probably more flowers used than at all the others combined. Messrs. Small & Sons had 15 men working all day Sunday and Sunday night preparing flowers for designs which were to be delivered at the Blaine mansion not later than 9 a. m. Monday. Violets and valley predominated in most of the pieces. One of the wreaths had $150 worth of violets in it alone. The majority of the pieces were wreaths, some being entirely of orchids. The display of floral tributes was the most remarkable ever seen at a funeral in this city. The casket when brought into the church was placed upon two floral pedestals, beneath which was a representation of a Persian rug in flowers, which was 9 feet 6 inches by 5 feet 4 inches; worked in the figures were Meteors, Beauties, Cusins, Mermets, Wattevilles, Brides, white carnations, Roman hyacinths and violets, the rug being fringed with lily of the valley. The center was a deep red shading to a white. Among the other handsome pieces was a Ship of State; a rich wreath of orchids, roses and violets; a wreath of violets; a garland of violets; white orchids and violets; a very large wreath, 6 feet in diameter, of roses, violets and valley with streamers of ribbon, and many other handsome arrangements. It is said that thousands of dollars were represented in floral offerings at this funeral.

The decorations at the church were very rich and effective. The terrace formed by the pulpit and the rail separating the organ gallery from the platform afforded a good background for a striking massing of plants and cut flowers. On the edge of the pulpit cut flowers were arranged in a ribbon 10 to 12 inches wide. The ribbon was of roses, valley, azaleas, carnations and hyacinths. Below this ribbon and suspended from it across the front and curved sides of the pulpit were short festoons of smilax. The baptismal font at the right of the pulpit was twined with smilax rope and in the bowl was a bunch of narcissus and Harrisii lilies. Over the cut flowers were decorative foliage plants terminating with callas in flower. A similar ribbon of cut flowers, including narcissus and jonquils, ran along the upper edge of the rail of the organ loft. This was matted in ferns and asparagus. At either end of rail, against the wall, stood an immense rubber tree, and, towering over all, immediately behind the reading desk were two kentias. The front of the organ was covered with curtains of smilax, ropes of smilax dropped from the apex of the instrument to the candelabra on the side walls of the organ loft. This decoration was made under the direction of Mr. Geo. H. Brown, superintendent public grounds, and has never been surpassed here in either profusion or effect. The church looked as though it was decorated for a wedding instead of a funeral. It was a credit to both Mr. Brown and those who executed his design.

The space in front of the pulpit in which the casket was placed was entirely covered with the floral emblems which accompanied the remains from the house. These were disposed in such a way as to heighten the effect of the stationary decorations.

At a meeting of the executive committee of the N. G. C. held Tuesday evening, January 10, for the purpose of auditing the accounts of the secretary and treasurer, it was found that we had a small surplus remaining from the appropriation made for entertaining the S. A. F. last August. On motion of one of the members, it was agreed to give a supper early in February to all the members of the N. G. C. and those who contributed so much to the success of that meeting. Messrs. Clark, Hale and Freeman were appointed a committee to make arrangements for the supper.

We have a few copies of the S. A. F. souvenirs on hand. It was proposed to send a dozen or more of them to the secretaries of the various florists clubs in the principal cities whose society was willing to pay express charges on same. They can communicate with Mr. C. F. Hale, 719 14th street, N. W. Washington, on this subject. We thought this a good way to get the souvenir in the hands of the young men members of the S. A. F. who are in the employ of florists and who were unable to attend the convention.

C. LESLIE REYNOLDS.

New York.

The event of the past week has been Pitcher & Manda's orchid show at Short Hills. The attendance has not been as large as customary owing to the very inclement weather but the exhibition was in many respects the finest ever given by this firm. The number of orchids in bloom was very large, the cattleyas especially making a grand display. Trianæ in many forms and Percivaliana were the principal species in bloom. Of cypripediums there are estimated to be fully 5,000 blooms on the plants, comprising over 200 kinds, and the long keeping quality of these flowers is shown by the fact that some of these blooms did duty at the chrysanthemum show early in November.

Of varieties and novelties there were many, the white forms of Cattleya Trianæ Cattleya Percivaliana, Lycaste Skinnerii and Saccolabium giganteum being among the most noticeable.

The palm house is in itself a grand show. The gigantic tree ferns have made fine heads this winter and now form a veritable forest. A number of the largest of these specimens will be sent to the World's Columbian Exposition.

A valuable novelty seen here is the variegated form of Yucca filamentosa, which is almost as handsome as Pandanus Veitchii. Another new thing interesting but of doubtful value as compared with the yucca is the variegated potato. The marking of the foliage is very handsome and the tubers are said to be of fine quality. Mr. Manda advances the idea that possibly the potato bug will be unable to recognize its friend in this new dress.

Speaking of Mr. Craig's method of raising young Cocos Weddelliana Mr. Manda says that his way is to pot off the young seedlings at once as soon as they germinate. The otherwise troublesome tap root then winds itself round inside the pot and gives no further bother.

On Saturday evening occurred Charlie Weathered's "Smoker." The crowd at the club rooms was large and very jolly. There were six visitors from Philadelphia, Messrs. Craig, Farson, Lonsdale, Westcott, Watson and Battles.

A table was spread with an elegant lunch, and shaded by two big Japanese umbrellas, from the ribs of which were suspended the long stemmed pipes each decorated with a knot of ribbon. The pipes were soon in active service and during this part of the ceremonies the guests were entertained with banjo solos by Mr. John Turner, reputed to be the finest player in the country. Mr. Grier who contributed humorous recitations, and Prof. Water who was intensely amusing as a magician and brought down the house by discovering an ace of spades hidden in Mr. Nash's hat, and producing from the hat of Koffman, the Smilax King, articles enough to stock up a fair sized notion shop. Altogether Mr. Weathered is to be highly congratulated upon the great success attending his entertainment.

The supply of cut flowers coming in has suddenly decreased and the demand has increased in equal degree. Roses are decidedly scarce and the quality of those coming in averages very poor. American Beauty is especially in bad condition, scarcely one out of a hundred being worthy of being classed as extra. Hybrids are also poor the Magna Chartas from Julius Roehrs being about the only exception to the rule.

Carnations are running very small and inferior also. Bulbous stock does not share in the revived demand but is as dead as ever. Tulips, narcissi, freesias, Harrisii lilies, lily of the valley and hyacinths are all suffering severely and seem to have completely lost their hold on the public fancy.

Mr. Wm. Plumb has gone to Atlanta, Ga., where he is to assume the position of superintendent of the West View Cemetery Co., and the West View Floral Co.

Philadelphia.

As Lent approaches the social season waxes warmer, and trade is correspondingly better. Good shopping weather also tells on the transient trade, and the past week has shown quite an improvement in this respect.

The downward movement in the prices of flowers has come to a halt, as there seemed to be a demand for all the stock offered, if we except carnations, and even these have moved better. Mermets, Brides and LaFrance are now bringing 8; Cusins, Wattevilles, Bennetts, 6 to 8; Meteors, 12; Perles, Hostes, Gontiers, Niphetos, 4 to 5; Beauties, 25 to 50; Brunners, 75; Laings, 30 to 40; carnations, short, 1.00; long, 1.50; freesia, 1.50 to 2; Valley, 2 to 3; Romans, 3; tulips, 5; daffodils, 5.

In blooming plants there is now quite a variety. Harris' genistas are better than he has ever had them before, and are selling well. His azaleas are also very fine. L. Ball, of Wissanoming, is in the market with a house full of genistas, especially useful for decorating, being tall and naturally grown. There are also plenty of cyclamens, cinerarias, daffys in pots, tulips and valley in flats, and a host of Lilium Harrisii. Lemuel Ball cut the first Brunners and Laings from his hybrid house Feb. 3. They are fine flowers. Anderson and Heacock are also offering grand blooms of these roses, but like everything else that is well grown they sell quickly, and there are not enough to supply the demand.

Mr. John Irvine, of Bay City, Mich.,

paid this city a visit Saturday, the 4th inst.

Several of the trade about here, paid a visit to the United States Nurseries during their orchid show, and were loud in their praises of the wonderful exhibit of these magnificent flowers.

Mr. Harris still maintains his lead in the ten pin tournament now in progress at the club room, with Brown a good second. Campbell leads in the second class, and Nisbet in the third. John McLean is first man in the fourth or novices' class. K.

Chicago.

Trade continues good; in fact sales are better than at any previous time during the winter. Home trade is brisk and outside orders are better than they were. Roses in general are good, excepting Beauties, which are very much below the standard; in the long run it would pay better to throw away malformed, diminutive, off color short-stemmed Beauties, rather than to bring them in to discredit the variety. There are no hybrids in, though it is expected that there will be plenty of Jacqs before long. It is to be regretted that the Jacqs have not been in during the past two weeks, as there is little doubt that they would have sold well. Red roses seem usually in very good demand.

In carnations we see some good flowers; the leading fancy from home growers is Daybreak, though a few good Garfields are seen. Some of the commission men are getting carnations from Kennett Square and other eastern points. T. J. Corbrey & Co. receive among their fancies Mrs. Harris, white with a pink blotch in each petal; they say that this is very much admired and eagerly bought in the Chicago market. Another favorite is J. J. Harrison, which may be called the leading favorite among striped sorts. L. L. Lamborn is another sort received from the east; it sells very well here, its large size and purity of tint recommending it.

Harrisii lilies are still very plentiful, having been grown largely all around here. All bulb stuff is plentiful; daffodils are selling well, and valley is excellent. Dutch hyacinths are more plentiful. Orchid flowers are selling better than any former season. Cattleyas, cypripediums and lycastes are now sold, but the lycastes, in spite of their beauty, are not so much admired as the cattleyas and cypripediums. They sell for 25 cents, the cattleyas for 50 cents.

Supply and demand are just about equal, the market being sufficient to take up all the stuff coming in.

St. Louis.

The weather for the past week has been a continuance of what has gone before; in fact no one can remember the time when we have had the continuous cloudy weather that has been prevalent this season. After promising a change the first part of the week, we caught it in the shape of a blizzard, accompanied by rain and sleet, and as a consequence everything is under an inch or two of ice, and locomotion is rather difficult.

As a result of the weather flowers are, and have been scarce; good stock is sold at sight and hard to get. Von Sion narcissus have made their appearance during the week and are in very good demand.

Those of us that issue catalogues are very busy wrapping and stamping the huge piles, and are longing for the time to come when catalogues can be mailed by weight, thus doing away with considerable labor and expense.

There have been two important committee meetings, one with regard to the entertainment of the S. A. F., and the other in regard to the advisability of holding a chrysanthemum show in the fall. The first committee has outlined a course that will be submitted to the club for approval at its next meeting. The second committee consisted of five members, but three of whom were present. They engaged, however, in some lively debates, and it was a pity there was not a full attendance. Finally a report was adopted advising the holding of a show, to be conducted upon somewhat the same lines as have been followed the past two seasons. The appropriations for expenses have been increased considerably, while the premiums as yet remain the same. We understand however there is to be a minority report read also; this will bring out a full and complete discussion of the question, to the benefit of all concerned.

At the meetings of the above committees there was shown a home grown Catherine Mermet, which proved to all present that roses can be as well grown here as anywhere in the country.

R. F. T.

Boston.

There is a sudden scarcity of roses. All kinds are in demand, particularly those of the higher grades. The weather has been dark and muggy and not conducive to fine coloring on the roses, and besides every grower in this vicinity seems to be off crop. Carnations have also shortened up considerably in quantity and have deteriorated somewhat in quality.

The weather which has been so unfavorable to flower culture has one bright side to it, notwithstanding, and that is its effect on the landscape. Almost every day for the past week the trees have been fringed in silver and the picture has been one of extreme beauty. The same ice, however, that made the trees glisten has also made locomotion difficult and the slippery sidewalks and doorsteps have much to answer for. One of these little tragedies happened on Sunday evening at the residence of Mr. Thos. H. Cox. Mr. Cox was descending the steps with the dog's supper in one hand and a lantern in the other; Mr. Jackson Dawson was in front of him. One slip did the business, and that is the reason why a certain dog got no supper and why two of Boston's heavy weight men are now done up in bandages.

Violets are more plenty and are of good quality. A. P. Calder is cutting some of the finest that are coming into this market. Mr. Calder grows them largely, having about 20,000 plants, and has been uniformly successful every year. He claims that the great part of his success results from growing the plants cool. There are two large houses, one planted out and the other benched. The latter gives the bulk of the midwinter cut, but the former keeps in bloom several weeks later than the benched house. There is no sign of disease on any of them, but all yellow or decaying leaves are kept carefully picked off. Among the violets are planted several thousand anemones. The anemones throw but little foliage and do not harm the violets in the least. They are beginning to bloom and will continue to furnish flowers till July.

N. F. McCarthy & Co. have recently had a refrigerator built which has so far given them great satisfaction. It is very large, in fact, probably the largest single refrigerator in the country, devoted to the storing of flowers. It is built upon new principles, the main feature being the substitution of cold air circulation instead of dead air in the wall spaces. A patent on this and several other new features has been applied for by the builder, Mr. Thos. F. Black. Mr. McCarthy states that the new chest consumes only about one third the quantity of ice which is consumed by an ordinary refrigerator and that the temperature runs from 8° to 10° lower also. If this is so the improvement will be a valuable one for florists. The dimensions of this chest are length 24 feet, height 10 feet, depth 5½ feet. Ice capacity 130 cubic feet, flower capacity 600 cubic feet.

D. Hartford, formerly in the moss and fern business, has opened a bowling alley at Malden, and confidently expects that a large share of his trade will come from the florists of that enterprising suburb. He has already extended an invitation to the Boston Club to come and assist in dedicating the alleys.

The Newton Horticultural Society is preparing to make a vigorous warfare on the tent caterpillar and other insect pests, and has offered to residents of Newton to pay $1 for every collection of 1,000 belts of the eggs of the tent caterpillar up to April 30, and an additional special prize of $10 to the person bringing in the greatest number of belts.

Baltimore.

The most noticeable thing about the week has been the scarcity of good roses, and, in fact, good flowers of any kind. Roses, however, seemed specially hard to get, and there was trouble for any unfortunate who got him a large order without having in sight the wherewithal to fill it. Trade has not been very brisk either; here and there we hear of a large order, but as a whole business is rather slow. Whether matters would be bettered much by brisker demand, unless the supply should increase at the same time, may be doubted.

Theodore Eckardt of Baltimore County and Maxwell Sommerville of Philadelphia have filed in the circuit court at Towson a certificate of partnership for the purpose of carrying on the florist and nursery business at Ruxton, Baltimore County. The capital stock is $5,000 and the partnership dates from February 1, 1893, and expires February 1, 1898. Mr. Eckardt is a general partner and Mr. Sommerville a special partner.

S. Feast & Sons had an orchid dinner on hand January 29, and stopping in at their store the writer had the pleasure of seeing some very tasteful arrangements of these flowers. The centerpiece was a mass of Lælia anceps with sprays of Oncidium unguiculatum here and there through it, and two or three stems of the most superb Lælia Arnoldiana flowers yet seen, in the center. A few sprays of Lælia albida mixed with the anceps around the edge completed a most charming effect. In the language of Mr. Wm. Feast, "There's nothing like orchids after all when it comes to grace of form or delicacy of coloring." MACK.

Indianapolis.

In not making my figures properly in my last correspondence a mistake was made: it should have been 16 members and $100 instead of 76 and $700.

I want to enter a protest against those

wholesale dealers that advertise goods and then either because they have not got the goods or else don't use common sense, fail to notify the retail dealer *at once* that they can not or do not want to fill orders.

The regular monthly meeting of the Indianapolis Florists' Club was held last Wednesday evening. Despite the weather a good many members were present. Several names were proposed for membership. Papers of great interest were read by Mr. John Hartje on "Violets," and by Mr. J. J. B. Hatfield on "Science in Plant Life." A lively discussion followed each paper and the gentlemen were thanked for their excellent essays.

Wm. Bertermann, secretary of the committee for the next chrysanthemum show, reported that the committee had selected the week beginning Nov. 7 for the 7th annual show. He urged that all members should try and get special premiums. He also stated that the expenses would be kept down to the lowest possible figures. The advance premium list will be issued about February 10.

Trade for January in this city has been unusually dull, with collections slow. Probably the extreme cold and wet weather has been the cause.

Mr. Herman Young, formerly employed at the Fairview Park greenhouses, and who is a practical florist and landscape gardener, was appointed City Florist and Landscape Gardener by the Board of Public Works January 1. W. G. B.

Buffalo.

There has been a revival of social events this past two weeks, which has improved trade all round, and few flowers are going begging, except violets, of which there seems to be an unusually good crop this year. W. J. Palmer & Son report their roses of all varieties to be finer than for years past; that looks as if a severe cold winter was good for roses.

We came very near losing a valuable collection this week. Our veteran hybridist and botanist, J. F. Cowell, whose greenhouse is at present full of a magnificent collection of primulas which he is seeding, found on his arrival home last Thursday, his chimney blown off even with the roof, and his house getting full of gas. By sharp and vigorous work a temporary chimney was got in place and very little damage was done. We should miss the collections of Mr. Cowell. Very much finer strains of primula, petunia and tropæolum than his are hard to find.

Mr. Beatty, of Oil City, gave us a call this week. He expects to see a large gathering at Pittsburg on the 21st.

W. S.

Toronto.

The growers are complaining bitterly at the lack of sunshine these days. Plants are looking well and thrifty and have lots of buds on them, but they can't open; consequently the demand for roses is considerably greater than the supply. It is not much consolation to tell them (the growers) that we shall have plenty of sun in May and June. Business is pretty good too now, considering that it snows more or less every day and still keeps very cold.

Seedsmen and others publishing large catalogues are bringing them across the border in bulk this year and posting them in the country, thus saving much inconvenience to their customers.

World's Fair matters seem to be about straightened out now. The plants will be sent as soon as the weather will permit of their being moved; they will go in charge of Mr. A. H. Ewing, head gardener at the Normal schools, accompanied by Mr. Wm. Houston, head gardener at the Central Prison. E.

OBITUARY.

WILLIAM DUNLOP BRACKENRIDGE died suddenly at his late residence, Govanstown, Baltimore Co., Md., on February 3, in his 83d year.

Mr. Brackenridge, who was one of our oldest nurserymen, has been identified with the best work of the country for many years. A careful history of his long and eventful life would read like a romance, and a brief sketch of it may not be uninteresting here.

He was born near Ayr, Scotland, June 10, 1810. After receiving a thorough education in the schools of his native town, one of his special studies being botany, he at the age of 18 years assumed charge as flower gardener of Sir John Maxwell's extensive pleasure grounds at Springkell, Scotland. After the expiration of a year, and at the solicitation of William McNab, Curator of the Edinburgh Botanical Gardens, he was appointed head gardener to Dr. Neill, at Edinburgh, where he remained four years. Subsequently he was engaged to lay out a large and elegant place for Count Ebors in Poland, after which he took charge of a department in the Berlin Botanical Gardens for three years under Professor Otto, after which he sailed for America, landing in Philadelphia in 1837.

He had not been in that city many days before he engaged as foreman with Robt. Buist. Such was his reputation, acquired in Europe, as an expert in botany, and so satisfactorily did he perform his duties while with Mr. Buist that the attention of Mr. Poinsett, Secretary of War of the United States, was directed to him as a naturalist, and his services were secured for the exploring expedition of Lieutenant Wilkes, then about to start.

The expedition sailed from Fortress Monroe in August, 1838, and was away four years, most of which time was spent along the west coast and among the Pacific Islands. The seeds, plants, etc. collected during the voyage finally formed what is now the United States Botanic Gardens. While exploring California, which they entered from the north, passing down from Mt. Shasta to the Bay of California, Mr. Brackenridge discovered the now famous darlingtonia or California pitcher plant in a very singular, almost accidental, manner. Having wandered some distance from the camp an alarm of Indians caused all to break into a run. Mr. B., however, attracted by a strange looking plant grabbed a clump and carried it with him. When he reached camp he found it to be this singular plant.

To him was committed the preparation of the ferns of the expedition, at which he spent three years of hard work. The book was published by the government and but a small number of copies had been finished and issued, when the whole of the manuscript, plates, etc., were destroyed by a fire.

On his return from the expedition he had married in 1843 Miss Isabella A. Bell of Jedborough, Scotland, by whom he had four sons and three daughters, the three daughters surviving him.

He succeeded Charles Downing as Superintendent of public grounds in Washington and to his taste and skill we are indebted for some of the finest landscape work in that city. On resigning this position he came to Baltimore County and established the florist and nursery business in 1854.

In 1876 he sold out the florist business to his then remaining son, Archibald, retaining the nursery, which he carried on until his death. His son Archibald died in 1886, since which time the florist business has been carried on by Wm. McRoberts under the name of Brackenridge & Co.

Mr. Brackenridge was for many years horticultural editor of the *American Farmer* of Baltimore and was always looked up to as an authority in matters connected with his business. He was one of the leading spirits of the Maryland Horticultural Society and but for his modest and retiring disposition would have been far more generally known and esteemed by the country at large.

[A portrait will appear in our next issue.]

Violets.

I would like to ask readers of the FLORIST who have had experience in growing violets what to do to make them bloom.

J. H.

"LADY H. CAMPBELL" is the name given us with some violets recently received from H. Huebner, Groton, Mass. The blooms are large, similar in color to Marie Louise. Mr. Huebner says he imported this variety from England several years ago, and has grown it ever since in place of Marie Louise. It is very prolific, and, so far, free from disease, the blooms large, with good stalks. Mr. Huebner keeps his houses warmer in day time than most growers do, but allows them to go down near freezing at night, and also syringes on sunny days, but early enough to let the foliage dry before night.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

ROSES.

FINE PLANTS and ROOTED CUTTINGS

AMERICAN BEAUTY,
LA FRANCE,
CATHERINE MERMET,
BENNETT,
BRIDE,
WOOTTON,
GONTIER.

METEOR,
PERLE DES JARDINS,
WATTEVILLE,
MME. CUSIN,
BRIDESMAID,
NIPHETOS,

Specially fine stock in the TWO MOST FASHIONABLE ROSES grown, METEOR and AMERICAN BEAUTY.

SEND FOR PRICES. CHAS. F. EVANS & BRO., FRANKFORT, PHILADELPHIA, PA.

Mention American Florist.

THE
ROSE
BRIDESMAID.
THE
PERMANENT-PINK,
NEVER-DEFORMED
PERMANENT-PINK,
NEVER-DEFORMED
PERMANENT-PINK,
NEVER-DEFORMED
PERMANENT-PINK,
NEVER-DEFORMED
PERMANENT-PINK
MERMET,
THE
ESTABLISHED
SPORT,
OF THE
SUNNYWOODS GREENHOUSES.
FRANK L. MOORE,
CHATHAM, Morris Co., NEW JERSEY.

Golden Returns.

200,000 ROSES 200,000

We offer well established, healthy plants in below named and many other sorts:

From 2-inch pots, $ 3.00 per 100; $30.00 per 1000
From 3-inch pots, 6.00 " 60.00 "
From 4-inch pots, 12.00 " 120.00 "
Not in excess of any one variety.

50,000 Hybrid Perpetual Roses 50,000
at $4 per 100; $40 per 1000, in 50 select varieties.

New and Rare Varieties at Special Rates given in our Wholesale List, now ready.

WE NAME A FEW SORTS ONLY:
Aurora, Bosanquet, Comt. de Labarthe, Bon Silene, Cels, Devoniensis, C. Mermet, Etoile de Lyon, Hermosa, Mme. Cusin, H. M. Stanley, Malmaison, Marie Guillot, Mme. Lambard, Marie Lambert, Marechal Niel, Kruger, Niphetos, Mme. Jos. Schwartz, Safrano, Perle des Jardins, Sombreuil, The Bride, etc., etc.

For anything in the Florist line, or send your lists to be priced. Address
NANZ & NEUNER,
LOUISVILLE, KY.

FORCING ROSES
All the old, and such new varieties as have been proved, kept in stock.
M. A. HUNT,
TERRE HAUTE, IND.

VERBENAS.
MAMMOTH, perfectly clean, strong, transplanted cuttings, well assorted, warranted to give satisfaction at $1.00 per 100 by express. Cash with order or C. O. D. by mail, $1.25.
W. B. WOODRUFF, Florist,
WESTFIELD, N. J.

Ignorance is not Bliss!

In the florist business ignorance is not bliss. To keep in the front of the procession the florist needs all the information he can get. The more information he acquires the brighter are his prospects for success in his chosen field. It will be in order therefore to look into the merits of the new Rose

"American Belle."

if you have not already done so. It is a pink sport from "American Beauty" and a distinct gain in color. It has created a sensation wherever shown and will be a great seller next season. Plants from 2 1-2 inch pots will be ready April 15, '93. Price, $60 per 100; $400 per 1000; (25 at 100 rate; 250 at 1000 rate). Send in your order as early as possible, as the stock will be shipped strictly in rotation.
JOHN BURTON, Chestnut Hill, Phila.

PERLE ROSES.
ALSO BRIDES AND MERMETS.
No better stock in New York State. Orders solicited for April or May delivery, in 2½-inch pots; or in 4-inch pots June and July.
NIPHETOS, BON SILENE AND MME. HOSTE IN LIMITED QUANTITIES.
Salter Bros.,
42 W. Main Street, ROCHESTER, N. Y.

HULSEBOSCH BROS.,
BULB AND PLANT GROWERS,
OVERVEEN, near Haarlem, HOLLAND.
Prices on application for the coming season of
ROMAN HYACINTHS, PAPER WHITE NARCISSUS,
LILY of the VALLEY, HARRISII LILIES,
LIL. LONGIFLORUM, TULIPS,
DUTCH HYACINTHS, CROCUS,
SPIRAEAS, ROSES, ETC., ETC.
Spring Catalogue now ready. ADDRESS
A. HULSEBOSCH,
P. O. Box 3118. Warehouse 58 West Street,
NEW YORK CITY.

ROSES.
TEAS . . . . . $30.00 per 1000
HYBRIDS . . . . . 40.00 per 1000
Healthy plants, in 2-inch pots.
Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.
Trade list on application.
Jacob Schulz,
LOUISVILLE KY.

Hybrid Perpetual Roses,
Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.
Price Lists to applicants. Address
WILLIAM H. SPOONER,
JAMAICA PLAIN, (Boston), MASS.

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

I WILL OFFER CHEAP
FOR NEXT 30 DAYS,
The following Roses, rooted in December, and as fine and healthy stock as any grower can send out.
SEND FOR PRICES.
Bridesmaids, Richardias,
Brides, Amaryllis of sorts,
Mermets, Daybreak carnations,
Perles, Geraniums,
Sunsets, Smilax and
Niphetos, Florists' Seeds.
Address E. HIPPARD, Youngstown, O.

Roses of Rare Excellence; strong 1 and 2-yr., outdoor grown, budded and own roots. Leading Nurserymen call them "best ever seen." Shall we express sample?

	100	1000
Climbing, 2-yr., 3 to 5 ft., own roots	$8	$70
" 1-yr., 2 to 3 ft., own roots. . . .	7	60
Hyb. P., 2-yr., 2 to 4 ft., budded or own roots	9	85
" 1-yr., 1½ to 2 ft., " " "	8	75
Mad. Plantier, 2-yr., 2 to 4 ft., own roots . .	8	70
" " 1-yr., 1½ to 2 ft., own roots .	7	60
Moss, 2-yr., 2 to 4 ft., budded or own roots. .	9	85
" 1-yr., 1½ to 2 ft., budded or own roots	8	75

Evergreens, 2, 3 and 4 feet, fine. Full Stock Fruit Trees, Ornamentals—Everything! Stark Bros., Louisiana, Missouri.

THE ANCHORAGE ROSE CO.
Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.
SEND FOR PRICE LIST. . . . . .
ANCHORAGE ROSE CO., Anchorage, Ky.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

A Great Horticultural Event.

The arrangement of dates for the annual meetings of the Society of American Florists, the American Seed Trade Association and the Horticultural Division of the World's Congress Auxiliary so that these three important occasions shall follow directly one upon another gives us now the assurance that this will undoubtedly be the greatest horticultural event of the century, and will bring together from all parts of the world the most distinguished representation of eminent horticulturists ever convened in America.

This great triple occasion is one which deeply concerns every man who follows the pursuit of floriculture in any of its branches. To elevate, to enlighten, to instruct, to unite into one grand movement feeble individual effort, and to attain those great results which can only be accomplished through the strength which comes from united effort, these are the aims and the only aims, and the only ends sought. It is to be hoped that all in our profession from one end of the country to the other will rise to a full realization of their duty to themselves and to their fellows, and do all in their power to make of this year's notable occurrences, this horticultural event the most notable of all. It is not too early to begin to plan. You cannot afford to stay away, and the two weeks spent at St. Louis and Chicago next August will never be regretted by those who shall have had the good fortune to be present.

THE Penn. Horticultural Society has issued an advance sheet, giving list of premiums offered at their spring show, which will be held March 14 to 17 inclusive. Among special premiums the carnation is again honored; Robert Craig offers a silver cup for 12 blooms of a variety not yet disseminated, and Dr. Williams offers three cash prizes amounting to $50 for cut blooms and plants in pots.

THE NEXT of our series of special numbers will be devoted to the rose, the "Queen of Flowers." It will be issued about March 15 and will take the place of our usual special spring number. We shall make this issue even handsomer than any of the special numbers yet issued and will spare no expense to make it worthy of the flower to which it will be mainly devoted.

WHEN writing our advertisers please use one of your printed business letter heads or enclose your business card.

2,000 SMILAX
at 15 cents per String.
R. DAVIS & SONS, Morrison, ILL.

T. J. CORBREY & CO.,
45 LAKE STREET,
CHICAGO.

We are prepared to fill shipping orders with the best flowers in the Chicago market. Orchids in five, ten, fifteen and twenty dollar boxes.

Give us a trial when you want anything in the Cut Flower line.

CONSIGNMENTS SOLICITED.

Asparagus Plumosus Nanus.
CUT STRINGS: 6 to 8 feet long, 50 cents each. 10 to 15 feet long, $1.00 each.
In large or small quantities all the year round. The largest stock in the country.
W. H. ELLIOTT, Brighton, Mass.

IF YOU NEED ANY
Cape Flowers, Immortelles, Grasses, plain or fancy Baskets, Metal Wreaths, Letters, Doves, or any other thing in the Florists' supply line, mail us your order.
REMEMBER WE ARE THE Leading Manufacturers of Wheat Sheaves and Baskets, and Importers of Florists' Supplies.
Catalogue on application. . . .
ERNEST KAUFMANN & CO.,
113 N. 4th Street, PHILADELPHIA, PA.

WISCONSIN FLOWER EXCHANGE,
WHOLESALE
Cut Flowers AND Florists' Supplies
131 Mason St., MILWAUKEE, WIS.
CONSIGNMENTS OF FIRST-CLASS STOCK SOLICITED.

H. BAYERSDORFER & CO.,
WHOLESALE
FLORISTS' SUPPLIES ONLY,
56 N. 4th Street,
PHILADELPHIA, PA.
Our new Catalogue is now out, free upon application.

MARSCHUETZ & CO.,
FLORISTS' • SUPPLIES,
23 & 25 N. 4th St., PHILADELPHIA, PA.
Send for Catalogue.

WHITE DOVES
FOR FLORISTS.
Largest and finest stock in the United States. Write for prices to
S. J. RUSSELL,
103 Van Winkle St., Jersey City, N. J.
AGENTS:
J. C. Vaughan, Chicago, Ill.
H. Bayersdorfer & Co., Phila., Pa.

VERBENAS MAMMOTH BEST SORTS, CLEAN, HEALTHY.
Stock plants, $1.00 per 100.
FOR MARCH DELIVERY:
Plants .....$2.50 per 100; $20.00 per 1000
Rooted Cuttings ....$1.00 per 100, $8.00 per 1000
Pelargonium, Fred Dorner ..... $10.00 per 100
Fine stock H. P., Tea and Forcing Roses.
JOSEPH HEINL, Jacksonville, Illinois.

HARDY CUT FERNS?
Oh Yes, over
5,000,000.
I can supply you the year round with A1 goods. Also new Bouquet Green, Laurel festooning, etc.
H. E. HARTFORD,
18 Chapman Place, BOSTON, MASS.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE
FLORIST,
1122 PINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

WM. ELLISON,
(Late of ELLISON & KUEHN),
WHOLESALE FLORIST,
AND FLORISTS' SUPPLIES,
1402 PINE ST., ST. LOUIS, MO.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

FINE CUT STRINGS
—OF—
Asparagus Plumosus.
JOHN BURTON,
Chestnut Hill, PHILADELPHIA, PA.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO,
(Successor to Vaughan's Cut Flower Dep't.)
All Flowers in Season.
Full line of FLORISTS' SUPPLIES.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
116 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.: Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange.
45 Lake St., CHICAGO.

M. OLSON,
Wholesale **FLORIST,**
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY & CO.
Wholesale and Commission
FLORISTS,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

WHOLESALE FLORISTS
La Roche & Stahl
N. E. CORNER
13th & Chestnut Sts.,
PHILADELPHIA.
Mention American Florist.

SAMUEL S. PENNOCK,
Wholesale Florist
REMOVED TO REAR OF 42 S. 16th ST.,
Philadelphia, Pa.

SMITH, The Florist,
GROWER OF
Fine Roses & other Cut Flowers
WHOLESALE AND RETAIL.
77 S. 7th Street, MINNEAPOLIS, MINN.

Wholesale Markets.

Cut Flowers.

NEW YORK, Feb. 7.

Roses, Bon Silene, Gontiers	2.00@ 3.00
" Perles, Niphetos	2.00@ 4.00
" Mermet, Bride, Hoste	4.00@ 8.00
" Cusin, Watteville	4.00@ 8.00
" Bridesmaid	6.00@12.00
" La France, Albany	5.00@12.00
" Meteor	15.00
" Beauty	15.00@100.00
" Hybrids	25.00@50.00
Carnations	.50@ 1.50
Mignonette	2.00@ 8.00
Romans, narcissus	2.00@ 3.00
Tulips, Valley	1.00@ 4.00
Harrisii	3.00@ 8.00
Violets	1.00@ 1.50
Adiantums	1.00
Smilax	15.00@20.00
Lilac (bunch)	1.00@ 1.50

BOSTON, Feb. 7.

Roses, Niphetos, Gontier	3.00@ 6.00
" Perle, Sunset, Wootton	6.00@10.00
" Bride, Mermet	8.00@16.00
" Meteor	15.00@20.00
" Beauty	50.00@75.00
" Hybrids	50.00@75.00
Carnations	1.00@ 1.50
Valley, tulips	3.00@ 4.00
Hyacinths, daffodils	3.00@ 4.00
Violets	1.00@ 1.50
Mignonette	1.00@ 6.00
Callas, Harrisii	8.00@12.00
Panaies, freesia	1.00@ 1.50
Smilax	17.00
Adiantum	1.00
Asparagus	50.00

PHILADELPHIA, Feb. 7.

Roses, Perles, Gontier, Niphetos, Sunset	4.00
" Mermet, Bride, Albany	8.00
La France	8.00
" Hoste, Cusin, Watteville	4.00@ 6.00
" Bennett, Wootton, Gulliot	6.00@ 8.00
" Meteor	10.00@15.00
" Beauties	25.00@50.00
American Belle	40.00@50.00
" Brunners	50.00@75.00
" Laing, Magna Charta	30.00@50.00
Carnations	1.00@ 2.00
Mignonette	2.00@ 3.00
Violets	1.00@ 1.50
Valley	2.00@ 3.00
Double daffodils	4.00@ 5.00
Tulips	4.00@ 5.00
Freesia	1.00@ 2.00
Callas, Harrisii	8.00@10.00
Adiantum	1.00@ 1.50
Asparagus	50.00@75.00
Smilax	15.00@20.00

CHICAGO, Feb. 7.

Roses, Perle, Niphetos, Gontier	4.00@ 5.00
" Mermet, La France, Bride	6.00@ 8.00
" Albany, Wootton, Bennett	6.00@ 8.00
" Beauty	20.00@25.00
Carnations, short	1.00@ 1.50
" white, long	1.50@ 2.50
" colored	2.00@ 3.00
" fancy	3.00@ 4.00
Romans Valley	3.00@ 4.00
Tulips	3.00@ 6.00
Narcissus	3.00@ 4.00
Freesia	3.00@ 5.00
Daffodils	6.00
Dutch hyacinths	6.00@10.00
Violets	1.00@ 2.00
Callas, Harrisii	12.00@18.00
Marguerites	.75@ 1.00
Heliotrope	1.00
Alyssum	.40
Smilax	15.00@18.00
Adiantum	1.00@ 1.25

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

N. F. McCARTHY & CO.
Wholesale Florists
AND JOBBERS IN FLORISTS' SUPPLIES,
1 Music Hall Place, BOSTON, MASS.
Also entrance from Hamilton Place through Music Hall.
We keep a large supply of Fancies and Carnations always on hand. Return telegrams sent immediately when unable to fill orders.
AUCTION SALES OF PLANTS SPRING AND FALL.

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., BOSTON, MASS.
Mention American Florist.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
The finest Roses, Violets and Carnations
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

HENRY W. BAYLIS,
Wholesale Florist
940 BROADWAY,
. . . . NEW YORK.

CUT SMILAX.
From Nov. 1st to May 1st our price for Smilax will be 20 cents per string. Quality first-class. Prompt attention to orders by wire.
J. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

The Seed Trade.

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1883. Applications for membership should be addressed to Wm. Meggatt, chairman membership committee, Wethersfield Conn.

EDWIN A. TAYLOR, of Kearney, Neb., has been authorized by Professor E. T. Hartley, superintendent of the Nebraska horticultural exhibit at the World's Fair, to prepare a seed exhibit. Mr. Taylor is secretary of the Central Nebraska Horticultural Society just organized at Kearney. Nebraska is the third state in the union in the amount of seeds produced. About 6,000 acres will be devoted to that purpose during the coming season in Nebraska.

JOHN W. LAUTERBACK, the well known basket dealer of New York City, is reported to have committed suicide on February 4, by throwing himself from a window, on account of business reverses.

J. A. EVERITT, seedsman at Indianapolis, has just moved into a new 5-story and basement brick building 23½x195 ft.

PHILADELPHIA.—Z. De Forest Ely & Co. have removed to a new and commodious store at 1024 Market street.

H. W. BUCKBEE, of Rockford, was burned out February 2. Loss estimated at about $30,000.

Catalogues Received.

D. M. Ferry & Co., Detroit, Mich., seeds; J. J. H. Gregory & Sons, Marblehead, Mass., seeds; John McGowan, Orange, N. J., carnations and cannas; Oscar Tiefenthal, Wandsbek, Germany, plants and seeds; Johnson & Stokes, Philadelphia, seeds; Steele, Briggs, Marcon Seed Co., Toronto, Ont., seeds and plants; Ellwanger & Barry, Rochester, N. Y., trees, shrubs and plants; J. C. Vaughan, Chicago, seeds and plants; H. F. Michell, Philadelphia, seeds; A. R. Ames, Madison, Wis., seeds; Louisville Floral Bazaar, Louisville, Ky., florists' supplies; Dingee & Conard Co., West Grove, Pa., roses, hardy plants, bulbs and seeds; Jos. Dickmann, St. Louis, Mo., seeds; Evergreen Lodge, Clarksville, Tenn., plants; A. W. Livingstons' Sons, Columbus, O., seeds; Jos. Breck & Sons, Boston, seeds.

BUTLER, PA.—T. A. Morrison, 212 South Main street, is an addition to the list of retail florists.

ROCHESTER, N. Y.—The 38th annual meeting of the Western New York Horticultural Society met here January 26, about 200 delegates being present.

MADISON, IND.—The Jefferson County Horticultural Society has been reorganized with the following officers: President, Ezra Wood; Vice-President, J. M. Cravens; Secretary, W. H. Smith; Treasurer, Thos. H. Watlington.

PORTLAND, ME.—Jos. A. Dirwanger has in bloom a lot of Chinese primroses which for size and color of bloom can not be excelled. He has also had great success with Cattleya Percivaliana this season, and a large number of plants of this useful orchid are now blooming.

NASHVILLE, TENN.—The horticulturists and floriculturists of Tennessee held a meeting in this city December 16 and decided to reorganize the State Horticultural Association, which was in existence a few years ago. Indications are that a strong organization will now be formed.

CINCINNATI.—Business is picking up slowly, but roses are scarce and there is very little prospect of an increased supply so long as the dark, gloomy weather lasts. Other stocks are more plentiful. A very choice lot of lilacs were recently received. The Charity Ball last week helped the retail florists considerably, many handsome bouquets being ordered for this event. Julius Baer & Co. are now remodelling their store and they will have a very handsome place when the work is finished.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—As assistant by young man 16 years old; two years' experience; private or commercial place. FLORIST "HOME," Xenia, Ohio.

SITUATION WANTED—By competent gardener and florist, German; 10 years experience; private or commercial; south or west preferred. Address B S, care American Florist.

SITUATION WANTED—By a florist, landscape and fruit gardener, 20 years' experience; German, single, 39 years of age. Address H. HELLER, care A. Schenkel, Denver, Colo.

SITUATION WANTED—By foreman of commercial place, where rose growing is a specialty. American; single; 18 years' experience. Address ROSE GROWER, Riverton, N. J.

SITUATION WANTED—As foreman; of exceptional ability and experience, who is also A1 floral artist; best of references; mention salary. Address A, care American Florist, Chicago.

SITUATION WANTED—Gardener and nurseryman; a young man who has had practical experience in the business. Good testimonials. Address FREDERICK EDMUNDS, care American Florist.

SITUATION WANTED By young man as second gardener on private place; experience in rose growing, orchids, etc.; references. Address GARDENER, Lock Box 577, Fishkill-on-Hudson, N. Y.

SITUATION WANTED—As foreman in private or commercial place; thoroughly experienced in every branch, especially rose growing and nurseries; 35 years old, married. Best references. Address ROSENGREN, Glenbrook, Conn.

SITUATION WANTED Private place, by a German florist; married; age 30; 15 years' experience; 6 years in this country. Good references. Open for engagement by first part of March. Address F K, care American Florist, Chicago.

SITUATION WANTED As grower of roses, carnations, etc. 12 years' experience. Married. Late foreman of J. H. Dunlop, Toronto, Ont. Good wages expected. Best of references. A. DIETRICH, 52nd St. South of Woodland Ave., West Phila., Pa.

SITUATION WANTED—Rose grower wishes position as foreman where Beauties and La France are wanted in quantity as well as quality. Only first-class places need apply. State wages. Married. Address C T, care American Florist, Chicago.

SITUATION WANTED By a practical florist with 28 years experience in growing roses, carnations, palms, orchids and general plants, good cut flower worker and decorator; married; the central or western states preferred. C M S, care American Florist.

SITUATION WANTED German gardener, thoroughly experienced in indoor and outdoor work, desires position in good florist's business, to work under foreman; eastern city preferred; best of references from Germany, England and this country; state wages. H. GERNET, care Mr. Vaughan, Western Springs, Ill.

SITUATION WANTED By an energetic first-class man, as head or second gardener; has had many years practical experience among orchids, stove plants, grapes, etc., with a thorough knowledge of outdoor work, both here and in England; references as to ability, habits, etc., from last employer. Address stating terms to ORCHID, care R. M. Grey, 137 Berkley Ave., Orange, N. J.

WANTED Practical florist; single man. Address, stating wages, etc., Box 161, Boise City, Idaho.

WANTED Intelligent young man for first-class florist store; one who has had some experience in the retail cut flower trade. Address 101 Euclid Avenue, Cleveland, Ohio.

WANTED Florist and gardener; married, without children, to take charge of private place March 1st. State experience and wages expected. Address GARDENER, 311 First National Bank, Chicago.

WANTED Experienced florist for commercial establishment; must know how to grow roses, carnations, violets and general stock. Write, stating references and experience. GRAND RAPIDS FLORAL CO., Grand Rapids, Mich

WANTED—Care taker for small farm, planted mostly in apple trees; must also have general knowledge as florist and gardener and understand taking care of team. Wages according to ability. HENRY A. ALDRICH, Neoga, Ill.

WANTED A good florist to take charge of greenhouses. State experience and wages expected, with board, where last employed. (Protestant preferred). A man 40 to 50 years of age. Address DAVID, P. O. Box 1117, New Haven, Conn.

WANTED—A thorough, experienced rose grower; only first-class man wanted. Must be married, sober and willing to work. Address, with copies of references from former employers, age, nationality and wages expected. ROSES, care Am. Florist.

WANTED—Vegetable gardener by March 1st, on gentleman's country place, single man, one who thoroughly understands growing all kinds of vegetables; situation permanent; state wages expected and give reference. Address GARDENER, P. O. Box 156, Philadelphia, Pa.

WANTED—Good all around man to take charge of a new place; must have experience in landscape gardening with knowledge of shrubs and trees and their management. Man of family preferred. Address giving experience, references and salary expected. S. M. MILLARD, 115 Monroe St., Room 42, Chicago.

WANTED—A competent man as foreman in a commercial place. Must be well recommended by someone of standing, as a good rose and carnation grower, also experienced in growing other stock usually grown on a commercial place. A good position for the right man. Address, stating wages required, age, where you have worked and how long. Address J C R, care American Florist, Chicago.

FOR SALE I will sell my rooted cutting business, greenhouses, etc., at a bargain; well established well advertised and growing. S. B. FIELD, Roselle, N. J.

FOR SALE—Six-room cottage with ground 50 feet front 160 ft. deep; also 3 greenhouses well stocked, on ground 150x160 ft. at Riverside, Ill. Apply to C. R. OVERY, La Grange, Ill.

FOR SALE—At a bargain and on easy terms, a good business in a flourishing city near St. Paul. Proof profits over $1,200 per annum. Address SELLER, care American Florist.

FOR SALE—Unequaled opportunity for a live florist to purchase a small, well-paying established business. For all particulars address Box 432, Haverstraw-on-Hudson, N Y.

FOR SALE—Florist and nursery business, 3 houses, 2,500 feet of glass, all new; within 100 miles of Chicago. Good shipping point; good reason for selling. Address A B, care American Florist.

FOR SALE—Three greenhouses, mostly new, well stocked; in a town of about 4,000; trade excellent; good reasons for selling. Address DR. F. M. MICHAEL, or H. F. HOLLAND, Eaton, O.

FOR SALE Paying florist's business, large selected stock, good patronage, home and abroad, ⅔-acre lot, good dwelling, splendidly located; best reasons for selling. Address PROF. BAGLEY, Abilene, Kans.

FOR SALE—12 section Foster boiler; will heat 2,000 feet 4-inch pipe, or 4,000 2-inch under pressure, or steam; has been used four years; is in good condition. Price $135. Address WM. A. BOCK, 329 North Ave., No. Cambridge, Mass.

FOR SALE—Eight greenhouses, 2 acres land, dwelling house, two windmills, barn, etc. Place suitable for florist or vegetable grower. On a main thoroughfare, ¾ mile from limits of city of Milwaukee, Wis. Electric street car line to be built past premises within one year. Houses all heated by Weatherred hot water boilers; two houses built in fall of 1881; six in fall of 1882. Present owners are going into the seed business For further particulars address AUG. BURMEISTER & CO., Box 4, Bay View Station, Milwaukee, Wis.

FOR SALE CHEAP.

An excellent commercial greenhouse establishment, 7 miles from Chicago City Hall, in city, 22 houses, about 100,000 square feet of glass, thoroughly heated by hot water and steam; also has fine residence for owner and one for superintendent, barns, ice house, roof house, perfect water supply, 3 acres of orchard, 2 acres of imported double peonies 3 years old, tools, etc. necessary for business; all situated on eleven acres of land alone worth $11,000. Title perfect. If looking for a great bargain to go into business, write for further particulars. Houses all stocked in perfect condition for continuing business. Address

M. E. PAGE, Jr.,
211 Lake Street, CHICAGO.

FOR SALE.

Ten greenhouses, about 15,000 square feet of glass, with two acres of land, and stock for sale very cheap. The houses are in good condition, situated in one of New England's best localities, with a large and extra good home market; heated by a first-class steam plant, cost $1200, pots and implements. This is a fine opportunity for one wishing to buy an Established Business, as the property is in good condition, ready for the coming season, and will be sold, as the present owner has other interests to look after.

For further particulars apply to

N. D. WINTER,
No. 5 Elm Street, Springfield, Mass.

We're Sweet Peas and, if you please,
We are "all the go,"
But you will need the best of seed—
Burpee's seeds will grow.

Burpee's Farm Annual for 1893

is the largest, best and most complete Seed Catalogue published. A handsome book of 172 pages. It tells all about the **Best Seeds, Bulbs and Plants**, including **Rare Novelties of Real Merit**, which can not be had elsewhere. Honest descriptions, hundreds of illustrations, with beautiful colored plates painted from nature. Mailed **Free** *to intending purchasers*; to others on receipt of ten cents, which is less than the actual cost per copy by the quarter-million edition. *Write to-day.*

Burpee's Blue List, giving wholesale prices for Market Gardeners and Florists, will be mailed on application.

W. ATLEE BURPEE & CO.,
Philadelphia, Pa.

Mention American Florist.

SMILAX.

Price, 15 Cents per String.

SEND US A LIST OF THE . . . .

Rose Plants

You are wanting, for our prices. 100,000 of all leading varieties in stock. List mailed on application. . . .

The National Plant Co.,
DAYTON, OHIO.

Mention American Florist.

Double Geraniums.

FINEST VARIETIES ONLY.

WHITE, PINK AND SCARLET, BY THE DOZEN, 100 OR 1000.

H. W. HALES, Ridgewood, N. J.

VIOLETS.

MARIE LOUISE RUNNERS

Healthy Stock. Good Plants.

ANDREW WASHBURN,

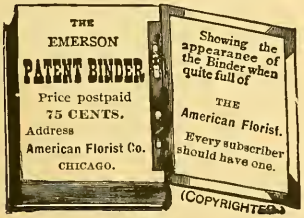
P. O. Box 1125. BLOOMINGTON, ILL

CHRYSANTHEMUMS.

ROOTED CUTTINGS.

Lincoln, Ada Spaulding, Domination, L. Boehmer, Roballion and 20 other good market sorts, $1.50 per 100; Jessica and Ivory, $2.50 per 100. Ready for delivery January 15th.

Address **J. G. BURROW, FISHKILL, N. Y.**



WE SELL SEEDS

TO FLORISTS AND DEALERS.

WEEBER & DON,

SEED MERCHANTS AND GROWERS,

114 Chambers St., New York.

Catalogues on Application.

Dreer's Double Petunias.

We offer a splendid lot in fifteen varieties of the best market sorts. The set is composed of the finest double fringed sorts, and equal to any ever sent out. Strong stock plants from 3-inch pots. $1.25 per doz ; $1.50 for set, or $10 per 100 all named.

HENRY A. DREER, 714 Chestnut St., Philadelphia.

BUIST'S

PRIZE MEDAL

ONION SEED

is everywhere celebrated for its **Great Purity and Strong Growth. Delivered free** to any part of the United States, at **$2.00** per lb., or **10** lbs. for **$17.50.**

'Yellow Globe Danvers,'
'Large Red Wethersfield.'

☞ Send for our **Garden Guide for 1893** — If you use **Seeds in Quantity**, will **make you Special Prices on your order.**

ROBERT BUIST
Seed Grower, PHILADELPHIA, PA.

BENJAMIN RIMBAUD, BULB GROWER,

Quartier du Temple, Toulon, var, France.

Cable address **Benrimbaud, Toulon.**

The largest cultures in the South of France, of **WHITE ROMAN HYACINTHS**, Narcissus Paper White grandiflora, N. Double Roman, N. **Double Von Sion**, true pure yellow, and other Daffodils. **Lilium Candidum**, the largest bulbs. Freesias. Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A. Double Rosette the earliest, etc. Prices on application.

German Lily

OF THE VALLEY PIPS.

A grand quality for forcing.

10,000 at	$7.00 per 1000
50,000 at	6.50 per 1000
100,000 at	6.00 per 1000

Free packing and cases, f. o. b. New York, Boston or Philadelphia. Net cash with order.

OSCAR TIEFENTHAL, Wandsbek, Hamburg, Germany.

E. G. HILL & CO.,

Wholesale Florists,

RICHMOND, INDIANA.

ROOTED CUTTINGS.

CARNATIONS, COLEUS, CHRYSANTHEMUMS and miscellaneous bedding plants cheap for cash. Send for Price List.

J. J. CONNELLY, Bryn Mawr, Pa.

BEST GERMAN FORCING PIPS

Price: $9 the 1000,
$20 the box of 2500,

Less ten per cent. for prompt cash.

August Rölker & Sons
New York, P. O. Station E.

GENUINE CHINESE SACRED LILIES

In original imported baskets of 30 large fine bulbs, per basket, $1.25.

It will pay you big to grow them. Innumerable flowers can be cut from them. Make money, buy some, order now.

H. G. FAUST & CO.,
64 & 66 N. Front St., PHILADELPHIA, PA.
Woodlawn Seed Farm, Philadelphia, Pa., 1,500 acres.

Send for Catalogue of
JAPAN BULBS, SEEDS, AND SHRUBS.
ARAUCARIAS,
AUSTRALIAN Palm Seeds,
CALIFORNIA BULBS AND SEEDS to
H. H. BERGER & CO.
ESTABLISHED 1878. SAN FRANCISCO, CAL.

G. J. MOFFATT,

Manufacturer of

PAPER BAGS AND ENVELOPES

Special attention given to
Seed Bags and Catalogue Envelopes.
NEW HAVEN, CONN.

LILIUM HARRISII.

Original and largest growers of this important bulb.

OUR SPECIALTY!

True Stock. Lowest Prices. Best Quality.

F. R. PIERSON CO.,
TARRYTOWN-ON-HUDSON, NEW YORK.

Violets.

In combating the violet disease we have found the Bordeaux mixture (the lime formula) of decided advantage, but it must be used during the summer regularly. As often as the plants make new foliage the mixture should be applied, for if a hot damp spell comes along and finds a lot of young foliage the conditions are just right for the germination of latent spores and spread of the disease, so that as far as we have been able to decide success with the Bordeaux mixture depends entirely upon its frequent application. When housing our violets, the 30th of August, we gave the plants a good dressing of the mixture and it is on the old foliage now. Wherever it touches the spot the latter does not spread any further, but one can not apply this mixture after the plants begin to bloom. We have tried the carbonate of copper and ammonia formula, but in every trial the ammonia burnt the foliage and we did not pursue our investigations further, as the spot has not appeared to any extent since the plants were housed.

The new double violet "Lady Campbell" seems to be a very promising variety and with it our success has been greatest; it does not seem as liable to disease as the older kinds, is sweeter than the old Marie Louise, has good long stems and is an all winter bloomer, commencing early in September and continuing until April. A grower near Boston has a large houseful which at the present time are a fine sight, not a speck of disease and the flowers are of such large size that he makes four bunches to the 100 instead of three, and his bunches are even then larger than many of the regulation size, 33 in a bunch. Florists who have failed with the Marie Louise will do well to try the Lady Campbell violet and use the Bordeaux mixture if disease does attack them. We have failed two years in succession with the Marie Louise, and this winter our Lady Campbell violets have given us a regular supply of good flowers since September. E. O. ORPET.

ZIRNGIEBEL'S
NEW AND IMPROVED STRAINS OF
ASTERS—Parisian, extra Early Dwarf forcing, will bloom by Easter. Zirngiebel's Extra Market for general crop. Both strains in white or colors.
STOCKS—Early Dwarf White and Dwarf Yellow.
MIGNONETTE—New Golden, selected seed.
NEW PERPETUAL SCOTCH PINKS and our well-known strains of GIANT MARKET AND FANCY PANSIES.
Any of the above in trade packages at $1.00 each.
DENYS ZIRNGIEBEL,
Needham, Mass.

ROOTED CUTTINGS of CARNATIONS
By the Wholesale.
Ready now. This is the best time for intending buyers to supply themselves. I offer them at moderate prices. Send for Price List. Address
JOSEPH RENARD, Unionville, Chester Co., Pa.

CATALOGUE PRINTING.
ELECTROTYPING.
Done with expert ability for Florists, Nurserymen, Seedsmen. Write to
J. Horace McFarland Co.,
HARRISBURG, PA.

ROOTED CUTTINGS.
CARNATIONS. Send for list.
GOOD STOCK. GOOD CUTTINGS. GOOD VARIETIES.
Big lot of LIZZIE McGOWAN now ready, at a bargain.
FRENCH CANNA. A splendid assortment at $4.50 per 100; $36.00 per 1000; good strong roots. Cash with order. Correspondence Solicited. Inspection Invited.
L. B. 496. ALBERT M. HERR, LANCASTER, PA.

CARNATIONS!
Study my WHOLESALE LIST of Rooted Cuttings
. . . before ordering. . . .
F. M. PENNOCK,
Bloomfield. Charles Town, Jefferson Co., W. Va.

SEE OUR PRICE LIST
in special carnation number of Jan. 19th, or address
EDW. SWAYNE, Carnationist,
. . . Kennett Square, Pa.

Rooted Carnation Cuttings.
WHOLESALE PRICE LIST NOW READY,
Containing a full list of best new and old sorts, including the Prize takers at MADISON SQUARE and PHILADELPHIA.
Address H. E. CHITTY, Paterson, N. J.

CLEMATIS.
Extra strong, strictly select stock. 4 years old; per dozen, $4.80; per 100, $38.00.
JACKMANNI, HENRYI, MISS BATEMAN, LANUGINOSA CANDIDA, LAWSONIANA, LUCY LEMOINE, JOHN GOULD VEITCH, SIEBOLDI (Patent Hybrid), STANDISHI, RUBELLA.
H. P. ROSES.
Strong plants, 2 years old, budded, $11.00 per 100; $100 per 1000. In order to enable you to pick your own variety send us your list at once. We have all the leading sorts to offer.
TREE ROSES.
In assortment, prime stock, $7.50 per doz.; $40 per 100.
FLOWER SEEDS.
Assortment complete. Send your order at once and have it filled by return mail,
W. W. BARNARD & CO.,
Bulb and Seed Merchants,
6 and 8 North Clark Street, CHICAGO.
Storage House 186 E. Kinzie Street.
Mention American Florist.

"CHRYS-COLA"
COLEUS, best Varieties, best Stock, now ready.
SEND FOR PRICE LIST.
FUCHSIAS,
GERANIUMS AND
CHRYSANTHEMUMS
are ordered to Feb. 15th, with the exception of a few varieties.
I am now booking orders for delivery after above date.
S. B. FIELD, Roselle, N. J.

Always mention the American Florist when writing to advertisers.

Siebrecht & Wadley,
ROSE HILL NURSERIES,
NEW ROCHELLE, N. Y.
Palms,
ORCHIDS,
Roses,
and New Plants.
FRESH DRACAENA CANES NOW READY.
Mention American Florist.

ORCHIDS.
The Finest Stock in the World.
SANDER'S,
ST. ALBANS,
ENGLAND.
Thirty minutes from London.
Our Mr. A. Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City.

DO YOU WANT
ALTERNANTHERAS rooted for $1 per 100, $8 per 1000
Per 100
COLEUS, 2 and 2½-in. pots . . . . $ 4.00
GERANIUMS, single red, 2 & 2½-in. pots, mxt. 3.50
" double red, 2 & 2½-in. pots, mxt. 3.50
" in 3 and 3½-in. pots 5.00
BEGONIAS, stock plants, 4 and 5-in. pots. . . 12.00
Rex and other best varieties.
If so, order soon of the
ELGIN ROSE CO.,
TELEPHONE 8.
519 Chicago Street, - - ELGIN, ILL.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

NOW IS THE TIME TO BUY

Carnations!

You want the BEST. We will give you the BEST ROOTED CUTTINGS to be had, if we get your order.

A postal card, with your address, costs one cent, will bring our TRADE LIST, the neatest of the year. It tells you all about the newest and best varieties. It tells the truth, and it's the truth that tells.

We also have COLEUS when you need them. You will certainly want our new yellow coleus.

ALEX. McBRIDE,

. . . . ALPLAUS, N. Y.

W. R. SHELMIRE,

Carnation Grower

AVONDALE, CHESTER CO., PA.

Send for price list of Rooted Cuttings.

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

ROOTED CUTTINGS OF

CARNATIONS

All the leading varieties.
Fine stock Buttercup.

CHAS. T. STARR, Avondale, Chester Co., Pa.

CARNATIONS

ROOTED CUTTINGS.

Send for Price List of all the leading varieties.

WM. SWAYNE,

P. O Box 226. KENNETT SQUARE, Chester Co., Pa.

ROOTED CUTTINGS

Of the Best Old and Most Promising new varieties of

CARNATIONS.

Write for a catalogue and send list of wants for an estimate.

J. J. Styer,
CONCORDVILLE, PA.

ROOTED CARNATION CUTTINGS.

NOW READY.

Of the best old and new varieties now in cultivation, in small or large quantities. Send for estimate of wants or price list,

ISAAC LARKIN, Toughkenamon, Pa.

ORDERS BOOKED NOW FOR MY SPECIALTIES FOR 1893.

New Jersey.—A scarlet Carnation hard to beat.....$12.00 per 100
Old Rose.—Old rose pink Carnation. .....$12.00 per 100
Nellie Bowden.—Pure bright yellow Canna.....$60.00 per 100

READY IN FEBRUARY.

Other varieties of Carnations, both old and new.

JOHN McGOWAN, Orange, N. J.

THE NEW WHITE CARNATION

GOV. RUSSELL

A SEEDLIN OF 1888.

Will be Distributed Feb. 15, 1893.

Price of Rooted Cuttings: Per 1000, $80; 500 at 1000 rate; per 100, $10; 25 or less, $2 per doz.

ORDERS WILL BE FILLED STRICTLY IN ROTATION.

FOR SALE BY

N. F. McCARTHY & CO., 1 Music Hall Place, Boston, Mass.
C. J. PENNOCK, Kennett Square, Pa.
and E. H. HUNT, 79 Lake Street, Chicago.

CARNATIONS

FOR 1893.

GRACE BATTLES. Having purchased an interest in Mr. Lonsdale's beautiful pink seedling, orders are solicited for delivery Feb. 15, my own growing.

From my list of the newer varieties note the following:

PEARL—White, with sometimes pink diffused, 3 to 3½ inches across, fine form, fragrant and handsome.

THOS. CARTLEDGE—Slightly deeper shade than Tidal Wave, with long, erect stems, flowers full in center, of fine form, productive and remarkably quick to come in bloom.

Puritan, Golden Triumph, Aurora, Nancy Hanks, Grace Darling, Crimson Coronet, Peachblow Coronet, Emily Pierson, Orange Blossom.

I shall make a special run on

ANGELUS—As a near approach to the ideal in form and habit, of good size, a lively shade of pink, deeper than Wilder without streaks in midwinter.

CÆSAR—As the finest variegated variety, very large and full, extremely productive, stems erect, highly recommended for crossing.

DAYBREAK—Delicate salmon pink, of good habit and constitution.

BUTTERCUP—As the standard yellow variety.

My annual list will contain full descriptions of the above and over 50 other varieties of my own growing which I shall offer the trade.

Correspondence and personal inspection invited.

C. J. PENNOCK,

The Pines. Kennett Square, Chester Co., Pa.

ORANGE BLOSSOM

CARNATION.

One of the leading new varieties, and an immense bloomer; received a Certificate of Merit in 1891; color Pink, Edged White.

Rooted Cuttings, $3.00 per 100; $25.00 per 1000.

MAY FLOWER, spleudid variegated, $2.50 per 100.
THE JENNINGS STRAIN OF PANSIES, trade packet, 2000 seeds, $1.00. Fine, stocky plants, small, 60c. per 100 by mail; $5.00 per 1000 by express.

E. B. JENNINGS,

Lock Box 254. SOUTHPORT, CONN.

When writing to any of the advertisers on this page please mention the American Florist.

Rooted Cuttings.

Carnations Hinze's White, Mrs. Fisher, Silver Spray, Jeannette, Grace Wilder, Fred Creighton, Mayflower, Century, Anna Webb, $1.50 per 100; $10 per 1000.

Orange Blossom, Portia, Hector, Florence, American Flag, $2 per 100; $15 per 1000.

Coleus, leading varieties, including the finest Yellow Coleus in cultivation. A new variety equal to Golden Bedder in color, and as good a grower as C. Verschaffeltii, $1.00 per 100; $8.00 per 1000.

Double Petunias in four finest varieties, $2.00 per 100.

Fuchsias, finest named varieties, $1.50 per 100.

Heliotrope $1.00 per 100.

Ageratum, Dwarf, White and Blue, $1.00 per 100.

500 at 1000 rates. Cash with order. 10 cents per 100 extra when shipped by mail.

JAMES HORAN, Florist,
BRIDGEPORT, CONN.

CARNATIONS

ROOTED CUTTINGS.

Puritan, Aurora, Golden Triumph, Grace Darling, Daybreak, Pearl, White Wings, Lizzie McGowan, Louise Porsch, W. F. Dreer, J. R. Freeman, and many other varieties; fine, healthy stock, ready January and after.

HYBRID PERPETUAL ROSES

500 Paul Neyron, strong plants....$10.00 per 100.
20 other leading varieties.....$10.00 per 100.
$90.00 per 1000.

☞ Send for price list.

WOOD BROTHERS,
Fishkill, N. Y.

CARNATIONS AHEAD.

You want the best in the market! We have them, 16 Novelties of '93, and all the STANDARD VARIETIES! Send for our complete Price List.

GEORGE HANCOCK, Grand Haven, Mich.

Packing Ice with Cut Flowers.

Regarding the query by your correspondent in a recent number as to the effect of ice packed along with cut flowers in winter, there is only one answer, viz: That ice in the box has no effect whatever on the freezing of the flowers. Unless the flowers are exposed to a *freezing* temperature, they will not freeze, and a freezing temperature cannot possibly be obtained by the presence of ice alone. On the other hand the presence of the ice is very desirable as a safeguard against the acts of over zealous expressmen, who are apt to think that close to a hot stove is the proper place for a box of cut flowers in winter. W.

Mulching Roses.

The practice of mulching roses in the fall seems to me very unwise. I consider it not only a waste of manure but often the cause of much damage. Instead of mulching with manure I prefer a half-inch top-dressing of compost in October, the same for roses that have been carried over, and when a crop is fairly advanced I water with liquid cow manure when the soil is in condition to take water. In my opinion liquid manure should never be given while the soil is wet. I have tried all sorts of fertilizers and have never found anything better than cow manure and that alone. Many of the chemical fertilizers I consider positively dangerous when applied under glass. RADICAL.

Potting Primulas.

In the FLORIST of January 26, under head of primroses, it is stated that the principal difficulty in potting the plants consists in having them sufficiently deep and still not too deep. I remember that years ago in growing primroses, the last potting we would allow about 1 to 1½ inches from upper rim of pot for either filling up with dirt, if the plant would prove too high or to leave if not too high. This was considered safer than finishing the operation at once. I found the article in question very interesting.
Anniston, Ala. F. J. ULBRICHT.

Heating with Hard Wood.

Should like some information in regard to heating a greenhouse 20x50 or 75, by furnace and hot water pipes, fuel to be used being good dry hard wood in two or four feet lengths. Wood is very cheap here. Any information on the above will be thankfully received. E. D. C.
Midland, Canada.

Water Lily Seed.

	Trade pkt.	oz.
Nymphæa Zanzibarensis	.50	$4.00
" " azurea	.50	4.00
" Cærulea	.50	4.00
" Scutifolia	.50	3.00

Tubers and Plants of all leading varieties.
WM. TRICKER, Dongan Hills, N. Y.

ONE MILLION

Trees, Shrubs, Decorative Herbaceous Plants, etc. for landscape gardeners, parks, cemeteries and private gardens.
Catalogues free. Prices low.
B. M. WATSON,
Old Colony Nurseries, PLYMOUTH, MASS.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser in these columns.

The three leading Florist Flowers:

CHRYSANTHEMUMS, CARNATIONS AND ROSES.

ALL THE NEW AND SELECTED STANDARD VARIETIES. . . .

My stock of all are as fine as can be produced at reasonable rates.
Complete list of these will be mailed to all applicants in the trade.

JOHN N. MAY, Summit, N. J.

AZALEAS FOR EASTER.

We carry in stock a full assortment of well furnished plants for Easter forcing and decorating, and will be pleased to book orders for shipping when weather moderates. The plants are in the best possible condition for shipping before the buds expand, and our friends will do well by ordering now rather than later when it is not safe to pack and forward any distance. We offer plants, 10 to 12 inches high, 10 to 12 inches in diameter, fine, bushy crowns, $5.00 per doz.; $40.00 per 100. Plants, 12 to 15 inches high and in diameter, $9.00 per doz.; $70.00 per 100. Specimen plants, 18 to 22 inches high and in diameter, $2.50 each; $30.00 per doz.
All the above are well set with buds and comprise the best market kinds.
HENRY A. DREER, 714 Chestnut St., PHILADELPHIA.

CROZY CANNAS.

WE ARE HEADQUARTERS . . for all the Novelties, and in addition control EXCLUSIVELY several grand varieties which we now offer for the *first time*. We will not be undersold on any of the list.

J. C. VAUGHAN,
New York: CHICAGO.
12 Barclay Street. P. O. Box 688.
Greenhouses: Western Springs. . . .

IF YOU WISH TO GIVE YOUR BUSINESS A BOOM!
PUT IN THE
SNOW CREST DAISY

T'wil help to cheer the winter's gloom,
And make the times go aisy.

Stock practically unlimited. All this DAISY needs is to be seen seen to be appreciated. It can BLOW ITS OWN HORN and make it heard the length and breadth of the continent. Its popularity is spreading like a wild fire, and will soon supersede everything of its kind. We propose to put the price within the reach of all, and give you a big Woodbury dozen, 15 for a dollar; 100 for $5. Sample plant in bloom for 12 cents in stamps, post free if you wish.

Try Gibson's beautiful, scented hybrid Pansy seed—a few ounces left. 500 seed 30c.; 1000, 50c.; ¼ oz. $1.50; ½ oz. $2.50; oz. $4.00. Plants of same 60c. per 100; $5.00 per 1000.

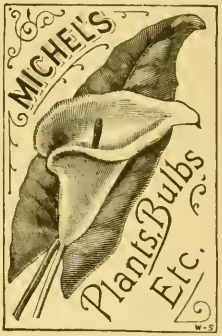
Now crop mammoth Verbena seed, splendid strain, in fine mixture, plenty of whites, intense crimsons and purples, with all the intermediate colors and tints, in packets of 1000 seeds, 50c.; ¼ oz. $1.10; ½ oz. $2.00. Our seedlings are up and growing nicely. Will have plenty of plants later.

Try the Dakota Primrose; you will be charmed with its great white, scented blooms, 2 to 3 inches across; 100 seeds, 25c.

Double fringed Dianthus, fine strain, all colors mixed, trade packet, 20c. Rooted Cuttings and small plants of our leading specialties later. Address, cash with order, please, J. C. GIBSON, Woodbury, N. J.

Mention American Florist.

TRY DREER'S GARDEN SEEDS
Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly, mailed free to the trade only.
HENRY A. DREER, Philadelphia



Write for wholesale list.
MICHEL PLANT AND BULB CO., ST. LOUIS, MO.
Mention American Florist.

THE SMILAX KING!

Who? KOFFMAN,
Where? WALDEN, Orange Co., N. Y.
What? SMILAX
25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.
When? ALL THE YEAR AROUND.
And he pays the Express.

CLEMATIS.

	Doz.	Hundred
2 Year Choice Assortment	$3.00	$25.00
1 " " "	2.00	15.00
H. P. Roses, Choice named kinds	1.50	10.00
Monthly " " " "	1.25	8.00
Daisy Snowflake, strong plants	.50	3.00
Dahlias, field grown, choice named	1.25	8.00

F. A. BALLER,
BLOOMINGTON, ILL.

GRAPE VINES.
(FOREIGN)

All the leading varieties for cultivation under glass, in following sizes: Fruiting vines for forcing in pots, 1 year, 2 years, and extra strong. Also Peaches and Nectarines specially prepared for forcing in pots and tubs. Booked orders stored until May 15th if desired. Prices upon application
JOHN G. GARDNER,
JOBSTOWN, N. J.

Mention the American Florist when writing to advertisers on this page.

A FEW Midwinter Bargains.

To keep business moving in the dull weather we make the

FOLLOWING SPECIAL OFFERS

	Per 100
PALMS, Washingtonia Filifera, large, from 7-inch pots	$35.00
Strong plants, from 5-inch pots	15.00
Phœnix Rupicola	35.00
Chamærops Excelsa, one of the best palms for small plants, nice plants from 5-inch pots	15.00
CORDYLINE INDIVISA, extra strong	5.00
CYPERUS ALTERNIFOLIUS	7.00
CORONILLA GLAUCA, large blooming plants, from 7-inch pots	15.00
ENGLISH IVIES, strong	7.00
AGAPANTHUS, 5-inch pots	7.00
MUSA ENSETE, kept over plants which will make immense specimens if potted on	25.00
HYDRANGEA OTAKSA, strong plants, from 7-inch pots	15.00
HYDRANGEA OTAKSA, strong plants, from 5-inch pots	7.00
HONEYSUCKLES, (Halleana), from 5-inch pots	7.00
" " 2-inch "	3.00
TRITOMA GRANDIFLORA, year old.	7.00
IVY GERANIUMS, best collection in the world	3.00
PHORMIUM TENAX	7.00

ADDRESS **E. M. MITCHELL,**
PORT HOPE, ONTARIO CANADA.
Mention American Florist.

THREE GRAND WHITE CHRYSANTHEMUMS.

MRS. JEROME JONES—
Awarded First Premium at Madison Square Garden for the best commercial variety, $2.50 per dozen.

JOS. H. WHITE—
A large dahlia-like, cream white variety, fine for cut flowers, $1.50 per dozen.

IVORY—
The best early white, $1.00 per dozen; $5.00 per hundred.

ELIJAH A. WOOD, West Newton, Mass.

New Chrysanthemums.

IRMA—Silver Medal and $50 premium at Cincinnati; also National Certificate; it is among the Pink Chrysanthemums what Mrs. L. C. Madeira is among the Yellow.
ERNST RIEMAN—Mahogany Red. Certificate.
BYNUM SCHILTGES—Dark Red. Certificate.
Above three varieties Strong Plants by mail $2.50. Send for Chrysanthemum List.

H. W. RIEMAN,
Cor. East and Morris Sts. INDIANAPOLIS, IND.

COLEUS AND GERANIUMS

Cut ings and potted plants.
Wholesa'e and Retail.

CHAS. A. BAIRD, Manalapan, Mon Co., N. J.

BLUE WATER LILY SEEDLINGS

from seedpans at $1 per doz ; $7 per 100.
FANCY CALADIUMS, small and medium size bulbs, from $5 to $9 per 100.
CAPE JASMINE, Rooted Cuttings from cold frames, at $1 per 100.

F. J. ULBRICHT, Anniston, Ala.

10,000 Vinca Major Variegata Vines

Strong Rooted Cuttings.
$3.00 per 100; $25.00 per 1000. Cash with order.
MARTIN BRAENDLEIN, Mapleton, Indiana.

BULBS AND TUBERS.

Tuberous Rooted Begonias, Fancy Leaved Caladiums, Crassifolia Gloxinias, Double, Single and Cactus Dahlias.

We offer the following bulbs, largely grown by ourselves, extra fine stocks and first-class in every way. Desirable and salable varieties to be offered in retail circulars and catalogues.

	Per doz.	Per 100
AMARYLLIS Formosissima	$1.00	$ 7.00
Johnsoni	4.00	30.00
Vittata	2.50	20.00
BEGONIAS, Tuberous Rooted, Finest mixed Singles, per 100 $6.00; per 1000 $50.00.		
" " " " Double	1.50	12.00
" " " " Single, Scarlet, Crimson, Yellow, White, Orange and Pink	1.00	7.00
DAHLIAS Pompone, Show Cactus, and Single varieties in fifty finest named sorts, strong ground roots	1.50	12.00
DIELYTRA SPECTABILIS, strong clumps	1.00	6.00
GLOXINIA CRASSIFOLIA in the finest mixture, extra selected bulbs	1.50	12.00
First size	1.00	10.00
Second size	.75	8.00
CALADIUMS, fancy leaved varieties in thirty distinct named sorts	2.00	15.00
IPOMEA PANDURATA	.50	4.00
TIGRIDIAS Conchiflora	.50	3.00
Grandiflora	.50	3.00
" Alba	.50	3.00

Orders booked now and reserved until weather moderates or shipment requested.

HENRY A. DREER, 714 Chestnut Street, PHILADELPHIA.

NOTE: In this adv. in previous issues, through a typographical error, "per 100 and per 1000" was inserted in the column under "per doz. and per 100," making it appear that all the following quotations were "per 100 and per 1000," when they were, really, "per doz. and per 100," the 100 and 1000 applying only to the single mixed tuberous-rooted begonias.—PUBLISHERS AM. FLORIST.

PYRETHRUM ULIGINOSUM (GIANT WHITE DAISY)

This is a good thing for cutting. Will flower first season from seed if sown early.
Fresh Seed Crop of 1892.
Trade pkts., 50c. and $1.00.

John Gardiner & Co.,
21 N. 13TH STREET,
PHILADELPHIA, PA., U. S. A.
Seed Growers, Importers and Dealers.

Trade list on application, but *for those in the trade only.*

Are You a Fruit or Flower Raiser? For Market or Pleasure—

If so, send for our Circular on Fungicides and Insecticides, which are **cheap** and **reliable.** Agents in every State. **Special Fertilizers** for Fruits, Flowers and Vegetables. Agricultural Chemicals. **W. S. POWELL & CO.,** Chemical Fertilizer Manuf'rs, **Baltimore, Md.**
S. F. LEONARD, Seedsman, Agent, Chicago, Ill.

Tuberous Begonias.

PER HUNDRED $6.00, SINGLE.
Young plants of different strains, double and single, in April, will bloom July 1st. Get them in April or early in May, there is a right time for everything.

BRAUER & RICHTER,
MCCONNELSVILLE, O.

MORE THAN 1,000,000 TREES

Fruit and Ornamental. SHRUBS, VINES, ROSES, etc., in over **1,000 Varieties.**
New and Rare. Old & Reliable. Send for our Illus. Catalogues.
W. S. LITTLE & CO. ROCHESTER, N. Y. or 15 E. 11th St. N. Y. City

SPHAGNUM MOSS. CLEAN, DRY, FINE. 1 Bale $1.25; 3 Bales $3.50; 10 Bales $10.00.
JOHN A. SALZER SEED CO., La Crosse, Wis.

New Chrysanthemums.

40 VARIETIES INTRODUCED IN 1892.
Twelve Plants for One Dollar.
Now ready for delivery. Send for Catalogue.
M. B. LITTLE, Glens Falls, N. Y.
Mention American Florist.

Azalea Indica

In bud or bloom, from 75c. to $1.50 each.

CHINESE PRIMROSES,
4 and 5-inch pots, $8.00 to $15.00 per 100.

WM. A BOCK, North Cambridge, Mass.
Mention American Florist.

P. SEBIRE & SONS,

Nurserymen, USSY, Calvados, France.
A general assortment of Fruit Tree Stocks such as Apple, Pear, Myrobolan Plum, Mahaleb and Mazzard Cherry, Angers Quince, Small Evergreens, Forest Trees, Ornamental Shrubs, Roses, etc. The largest stock in the country. Prices very low. Packing secured. Catalogue free. Send for quotations before placing your orders elsewhere. Agents for U. S. America and Canada.
C. C. ABEL & CO., P. O. Box 920, New York.

10,000 Nymphæa Odorata or White Water Lily Roots
FOR SALE.
Price, $5.00 per 100; $40.00 per 1000; or will exchange for seeds, plants or bulbs. For further particulars
ADDRESS B. L. CLARK, Randolph, Mass.

The Florists' Hail Association.

The Florists' Hail Association is nearing its sixth birthday, and it insures nearly 5,000,000 square feet of glass. One fact has been established, which is, that losses have been paid promptly when properly proven. Another thing is being taught by experience, namely, the length of time between assessments. Time alone can demonstrate this fully, but so far as we have gone the average has been one assessment for every 2½ years. While it is possible that this may vary greatly, yet the probability is, that 2 years will be the minimum time between assessment. A cost of 60 cents for $70 worth of insurance for two years on double thick, and 80 cents for $50 worth of insurance of single thick glass for the same time certainly cannot be considered exorbitant.

JOHN G. ESLER.

Wants to "Hiar" for the "Seson."

——, Jan. 27, '93.

Mr. ——, Der sir:—i understand that you want a practical gardner to work for you this seson i have not got any place particurlar for this seson i thought i would write to you and see what termes you wanted to hiar a hand i have had several years experince in Nurcery and Gardning i think i know some thing about it i can furnish good refernce if you want me to do so i can get a job at —— but i dont like the town i would rather come to —— for i think it is a better town i would like to move the first March

—— ——.

Magnolias.
IN VARIETY.
Cydonia Japonica.
ALL SIZES FOR HEDGING BY THE 1000.
Eulalias.
4 VARIETIES.
Send for wholesale price list of all kinds of hardy ornamental stock.
SAMUEL C. MOON,
Bucks County, MORRISVILLE, PA.
Mention American Florist.

SPECIAL BARGAIN IN
Japanese Bulbs, Seeds, Shrubs,
ARAUCARIAS, CYCAS, ETC.
Send for Catalogue.
FELIX GONZALEZ & CO.,
Nursery & Greenhouses: 303 to 312 Wayne St.,
SAN FRANCISCO, C L.

Kills Mildew and Fungus Growth. What does? GRAPE DUST. Sold by Seedsmen.

No Trees of 1st quality can ever be sent by mail. Mayhap you know it. By freight, prepaid if preferred, we ship safely 4, 5, or 6 ft. trees; 2-yr. Roses of rare excellence—everything! You actually pay less than for the puny stuff. 1,000 acres Nurseries. 20,000 acres Orchards. Exact information about trees and fruits. Stark Bros., Louisiana, Mo.

This Noblest of All Reeds,
"Arundo Donax,"
with its graceful tropical foliage, is the hardiest and most useful of the bamboo-like plants, and is particularly beautiful and effective when planted in an isolated position on the lawn or on the margin of a lake or stream. Last year the canes of this plant, with us, attained the
Height of 18 Feet.
Clumps, ... $3.00 per doz.
" . . . . 20.00 " 100.
ANDORRA NURSERIES,
WM. WARNER HARPER, MANAGER.
Chestnut Hill, Philadelphia, Pa.

100,000 VERBENAS. THE CHOICEST VARIETIES IN CULTIVATION.
Fine pot plants, $2.50 per 100; $20 00 per 1000 Rooted Cuttings, $1 00 per 100; $8 00 per 1000.
NO RUST OR MILDEW.
Packed light, and satisfaction guaranteed. Send for circular. . . .
Our sales reached nearly 250,000 last year, and we can assure our customers that our plants are fully equal, and assortment of varieties surpass those of last year.
J. L. DILLON, Bloomsburg, Pa.

Rooted Cuttings.

	Per 100
Carnations, New Scarlet, Emily Pierson	$3 00
Leading varieties	1 25
Violets, Russian and Neapolitan.	
Coleus and Alternantheras in var.	

Chrysanthemums.
Stock plants, large clumps, one hundred best varieties, 15 to 25 cts. each.
ROOTED CUTTINGS. . . .
SEND FOR LIST.
A. N. PIERSON, Cromwell, Conn.

FOSTITE. A successful remedy against MILDEW and RUST on Plants. Price, per 25 pounds, $2.00.
JOOSTEN'S MAGAZINE BELLOWS. The best Powder Distributor. Price, $3.50.
Sold by leading dealers, and by
C. H. JOOSTEN, 3 Coenties Slip, New York.

Rooted Cuttings of Evergreens, Hardy Flowering Shrubs and Hardy Perennials (Achillea, iberis, etc.) raised on contract for spring delivery. SEND LIST OF WANTS.
. . . ISAAC C. ROGERS, MOORESTOWN, N. J.

NOVELTY FOR 1893!
Variegated Hop.
(ROEMER'S.)
Most ornamental and fast growing Climber. Descriptive list, as well as of other EXTRA CHOICE FLOWER SEEDS free on application.
FRED. ROEMER, Seed Grower,
QUEDLINBURG, GERMANY

Mention the American Florist when writing to advertisers on this page.

Association "Flora"
BOSKOOP, HOLLAND.
Now on hand in New York:
CLEMATIS, 3 Years, per 100, $30.00
H. P. ROSES, for forcing, " 9.00
In the best variety, as Alfred Colomb, Anna de Diesbach, B Rothschild, Fisher Holmes, Gen. Jack, La France, Mme. G. Luizet, Mme. Plantier, Magna Charta, Paul Neyron, P. C. de Rohan, Merville de Lyon, Perle des Blanches, Ulrich Brunner and other sorts. Azaleas, Rhododendrons, Spiræas, etc. We also have Palms, Dracænas, Arancarias and Bay Trees at our nurseries in Holland. Catalogue on application.
P. OUWERKERK, 206 Cambridge Ave.,
JERSEY CITY, N. J.
Mention American Florist.

CUTS!

Wood Engraving,
Zinc Etching,
Half-Tone,
Wax Engraving, Photo-Engraving
Designing.

MANZ & CO.,
183 Monroe Street, CHICAGO. ENGRAVERS.

FOR Florists, Nurserymen & Seedsmen

GEM STEEL GEM WIND ENGINE AND GEM STEEL TOWER

The **GEM ENGINE**, when furnished with Graphite Bearings, requires no oiling, no climbing of towers, no hinged or frail-jointed towers and practically **no attention**, yet is more durable than other Wind Motors that require all this, and more unique in finish. The **GEM TOWER** combines beauty, strength, durability, simplicity to the greatest extent and has no equal. Both are manufactured and guaranteed by the oldest and most reliable Wind Mill Company in existence, and who build the **Halladay Standard Pumping** and **Geared Wind Mills**, the **Standard Vaneless** and **U. S. Solid Wheel Wind Mills**, Pumps, Tanks, Horse Hay Tools, &c. No other company offers equal Inducements. Send for Catalogue and Prices.

U. S. WIND ENGINE & PUMP CO.
BATAVIA, ILL., U. S. A.

BRANCH HOUSES: Omaha, Neb.; Kansas City, Mo. DEPOTS: Boston, Mass.; Ft. Worth, Tex.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

Clear Cypress, from bottom gutter up is my specialty.

Lyman Felheim,
ERIE, PA.

J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS •
Greenhouse Material,

LOUISVILLE, KY.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.
JOHN G. ESLER, Sec'y F. H. A., Saddle River, N. J.

Always mention the American Florist when writing to advertisers.

We endeavor to keep a full assortment of everything needed in the greenhouse. You will find our house gives exceptionally good service in such things as well as in **SEEDS** and **BULBS**. Here is a seasonable item:

Reliable Thermometers at Factory Prices.

MERCURY; JAPANNED CASE; METAL SCALE.

7-inch. . .....12c. each; $1.20 doz.	10-inch ....17c. each; $1.70 doz.
8-inch..... ..... 14c. each; $1.40 doz.	12-inch.....20c. each; $2.00 doz.

Mailing 5c. each. Half dozen at dozen rates.

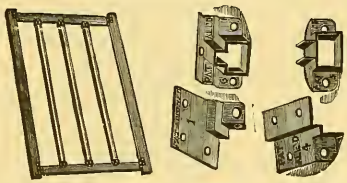
HOTBED THERMOMETER; spirit; wood frame; brass pointed; metal scale; best made, $2.00 each; mailing 10c. Indispensable in mushroom culture, etc.

☞ Express somewhat safer than mailing. *We mail only when requested;* but by our careful system of packing few breakages occur, even when sent by mail.

SYRINGES, HOSE POT LABELS, BELLOWS, FUMIGATORS, WATERING POTS, INSECTICIDES FERTILIZERS and all kinds of GREENHOUSE REQUISITES always on hand. Good quality. Reasonable prices.

☞ See pages 43, 44, 45 and 46 of our new Trade List. Copy for the asking if you have been omitted. . . . . .

JOHN GARDINER & CO.,
SEEDSMEN, PHILADELPHIA.



GARDENERS HOT-BED SASH.

INDESTRUCTIBLE.

CYPRESS GREENHOUSE WOOD WORK OF ALL KINDS.

Write for prices.

THE PEIRCE & COLEMAN CO.,
Dayton, Ohio.

J. C. VAUGHAN, Agent for Chicago and New York.

Pat. 1882, '85, '86, '88, '90, '91.

FOR WATER, AIR, STEAM, ACIDS, OILS, LIQUORS, GAS, SUCTION,

And for any and every purpose for which a hose can be applied.

Sizes, ¼-inch to 42 inches diameter.

The making, vending or use of any Serviceable Armored Wire Bound Hose not of our manufacture is an infringement on one or more of our Patents. The rights secured to us render each individual dealer or user responsible for such unlawful use with all the consequences thereof. For prices and discounts address **WATERBURY RUBBER CO.**, Sole M'f'rs and Owners of all the *Sphincter Grip Armored Hose Patents*, 49 Warren Street, New York.

J. C. VAUGHAN, Agent, CHICAGO.

Mention American Florist.

ESTABLISHED 1866.

FLORISTS WIRE DESIGNS

MANUFACTURED BY

N. STEFFENS

335 EAST 21ST ST. NEW YORK.

Mention American Florist.

PLANT BED CLOTH.

CHEAP SUBSTITUTE FOR GLASS on Hot-beds, Cold Frames, etc. Three grades.

Light, Medium, Heavy.

Used by Florists, Gardeners, etc., invaluable for Tobacco Growers. Protects from frost. Promotes, hardy, vigorous growth and keeps beds warm; will not shrink or mildew. For sale by the leading Dry Goods houses, Seedsmen, Florists, etc. Well known and extensively used. For circulars and samples apply

NATIONAL WATERPROOF FIBRE CO.,
50 South Street, - - NEW YORK.
Agents Wanted.

Always mention the AMERCAN FLORIST when writing to advertisers

---

YOU CAN SAVE MONEY BY PURCHASING, AND GLASS BY USING

Hamilton's Patent Sash Lifter.

The best thing of the kind ever invented, for either high or low greenhouses. Send for description and price list.

BAY STATE HARDWARE CO.,
272 Freeport St., BOSTON, MASS.

BOXES. BOXES. BOXES.

Three-Piece Wood Mailing Box.

The neatest and strongest box on the market. Send 15 cts. in stamps for sample nest and price list. I also make Cut Flower and Express Boxes.

W. E. SMITH,
Successor to SMITH & SMITH,
Hardin County. KENTON, OHIO.

Locomotive Boiler for Heating.

In reply to questions asked by J. E., page 524, would say, first, that I can have the choice of either a stationery return tubular boiler or a common portable one, which latter I understand to be about the same as a locomotive boiler, but would infer from his question that I am wrong. Would expect to use soft coal, or perhaps slack and wood, and of course want a boiler as economical of fuel as possible. Second, would like a combination of steam and hot water, using the hot water in mild weather, and steam in cold, as I think such an arrangement would economize fuel.

Would also like to ask another question: Can the fire in a steam boiler be banked at nine o'clock in the evening and maintain sufficient heat until seven in the morning with temperature at zero or lower? If so will some of the readers of the FLORIST please describe the banking of the fire? SUBSCRIBER.

THE BOILER MAKERS.—There have been a number of changes in business arrangements among the boiler makers of late. On January 23, The American Boiler Co., was organized, and in it are incorporated three large concerns, the Pierce, Butler & Pierce Mfg. Co., makers of the "Florida" boiler; The Richardson & Boynton Co., makers of the "Perfect" boiler; and The National Hot Water Heater Co., makers of the "Spence" heater. The capital stock of the new concern is $1,500,000. The business of the S. Wilks Mfg. Co., makers of the "Wilks" heater, has changed hands, having been purchased by Messrs. N. S. Bouton and E. H. Sedgwick. Additional capital will be used and the business expanded.

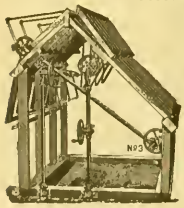
THE BEST POTS.
THE CHEAPEST.
THE LOWEST FREIGHT RATES.
THE BEST OF PACKING.
THE LARGEST POTTERY IN THE STATE FOR MAKING STANDARD FLOWER POTS.

PRICE LIST OF POTS.

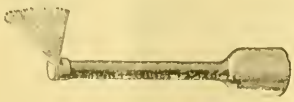
	Per 1000		Per 100
2 inch	$ 3.25	6 inch	$ 2.20
2¼ "	3.50	7 "	3.50
2½ "	4.00	8 "	5.00
3 "	5.00	9 "	7.50
3½ "	7.25	10 "	10.00
4 "	9.00	11 "	15.00
5 "	13.80	12 "	20.00

Terms: Cash, free on board cars here. Address
HILFINGER BROS., Potters
FORT EDWARD, N. Y.

THE STANDARD Ventilating Machines
Received best awards at
BUFFALO, N. Y., BOSTON, MASS., TORONTO, ONT.
Send for Catalogue and prices.
E. HIPPARD, Youngstown, O.



STOTT'S SPRAYER



Read advertisement in next week's issue.

"Standard" Flower Pots.
As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address
The Whilldin Pottery Company,
BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.
Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.
A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.
We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.
SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY,
Manufacturing the
ELVERSON, SHERWOOD & BARKER
STANDARD FLOWER POTS.
Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bud Pots, etc.
ADDRESS PITTSBURGH CLAY MF'G CO., New Brighton, Pa.

J. E. JEFFORDS & CO.,
OFFICE: 2715 Edgemont Street, PHILADELPHIA, PA.,
MANUFACTURERS OF
DECORATED AND PLAIN JARDINIERES.
A Large line of Colors and Decorations.
☞ SEND FOR PRICE LIST AND ILLUSTRATIONS. . . .

H. M. HOOKER COMPANY,
57 and 59 W. Randolph Street, CHICAGO,
NATURAL GAS MADE GLASS
FOR GREENHOUSES.
Write for latest prices.

U. S. AND FOREIGN PATENTS Trade Marks, Designs, Opinions, Searches, &c., promptly attended to. Send sketch or model for free examination as to patentability. All work strictly confidential.
GEO. H. CHANDLEE,
Atlantic Building, WASHINGTON D.
Mention American Florist

Please mention the American Florist every time you write any of the advertisers on this page.

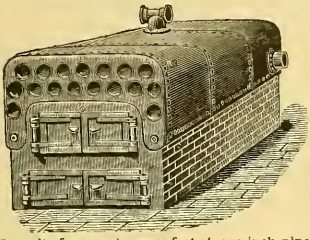
W. & C. CO. LIMITED
Wrought Iron Pipe, Fittings, Valves, ETC.
78 JOHN ST., NEW YORK.
WELLS & COUTAN CO., L'td.
Mention American Florist.

ESTABLISHED 1854.

DEVINE'S BOILER WORKS.

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers



Capacity from 350 to 10,000 feet of four-inch pipe. SEND FOR NEW LIST.

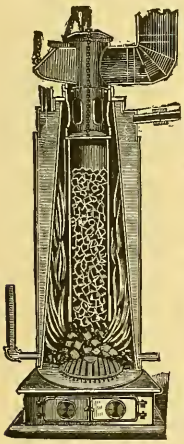
FRANK DAN BLISH, Att'y,

OFFICE, 189 STATE STREET.

WORKS, 56th & WALLACE STREETS.

CHICAGO.

Mention American Florist.



THE WILKS HEATER,

FOR HEATING

GREENHOUSES, STORES, DWELLINGS, ETC.

Manufactured by *THE S. WILKS MF'G CO.* 123 S. Clinton St., CHICAGO, ILL.

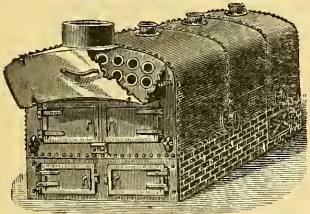
SEND FOR CATALOGUE.

KROESCHELL BROS.

IMPROVED

Greenhouse Boiler,

41 to 55 Erie St., CHICAGO.



Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around (front, sides and back). Write for information

FLORAL DESIGNS

The Cut Flower Worker's friend. Fine book of 160 pages. Send $3.50 for it, to

HORACE McFARLAND, Harrisburg, Pa

Mention American Florist.

THE "LOCKLAND" Sash Bars

ARE ALWAYS SATISFACTORY.

This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.

GUTTER MATERIAL, RIDGES, SASH, ETC.

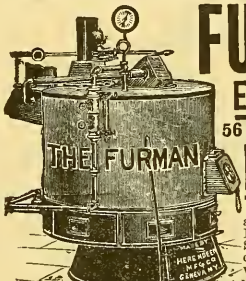
The finest CLEAR CYPRESS used.

Write for circulars and estimates.

LOCKLAND LUMBER CO.

Lockland, O.

Mention American Florist.



FURMAN BOILERS

Economical — Substantial — Safe.

56 STYLES AND SIZES—BURNS HARD OR SOFT COAL.

Modern Hot-Water Heating

These Boilers have a high reputation for Staunchness, Durability and Safety, and are GREAT COAL SAVERS. Minimum Friction and Maximum Velocity only obtained by VERTICAL WATER CIRCULATION. Send for new 150-page book giving full particulars and a great deal of valuable information on modern Heating and Ventilation, with plans and tables for correct hot-water work. Mailed free.

Address HERENDEEN MFG. CO., 26 Vine Street, GENEVA, N. Y.

RIDER

Do You Want A RELIABLE SUPPLY OF **WATER**

For Your GREEN HOUSE, ROSE HOUSE, NURSERY,

Conservatory, Lawn, House, Garden, Stock or any other purpose, WITHOUT EXPENSE OF TIME OR LABOR?

All of this can be accomplished by using the Improved RIDER OR ERICSSON **HOT-AIR PUMPING ENGINE**

ERICSSON

Catalogue with full partic lars, sent on application.

DE LAMATER IRON WORKS, 21 CORTLANDT ST., NEW YORK, N.Y.

D. H. ROBERTS,

159 & 161 S. Fifth Ave., NEW YORK,

NATURAL GAS MADE GLASS

for ROSE HOUSES, CONSERVATORIES, Etc., Etc.

Our Glass received the Highest Award at the Boston Convention of the S. A. F

FIRST-CLASS CERTIFICATE OF MERIT.

PERFECT DRAINAGE **BENCH TILE** • Used by all the leading Growers and Horticultural Builders.

For testimonials, circulars, etc., address W. P. WIGHT,

UPLAND GREENHOUSES, : : : MADISON, NEW JERSEY

GREENHOUSE HEATING

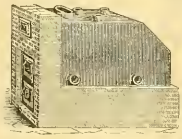
AND VENTILATING.

Superior Hot Water Boilers.

JOHN A. SCOLLAY,

74 & 76 Myrtle Ave., Brooklyn, N.Y.

Send for Catalogue.



GREEN-HOUSE HEATING.

MYERS & CO.

1518 & 1520 S. 9th St., PHILADELPHIA.

Send for catalogue and price list.

Mention American Florist.

Index to Advertisers.

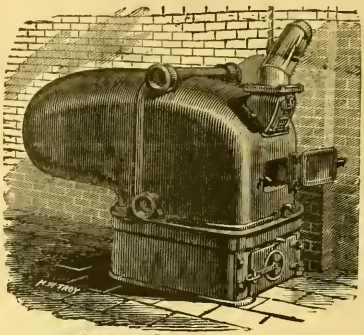
Abel C C & Co..... 687
Adv Rates, etc..... 680
Anchorage Rose Co ... 679
Andorra Nurseries..... 686
Baird Chas A..... 687
Baller F A 686
Barnard W W & Co.... 684
Bay State Hdw Co..... 684
Bayersdorfer H & Co .. 680
Baylis Henry W..... 684
Berger H H & Co..... 683
Bock Wm A 687
Bonsall Jos E & Son... 681
Boston Letter Co. 682
Braendlein M 687
Brauer & Richter 687
Bulst Robert 683
Burns & Raynor..... 681
Burpee W Atlee & Co.. 683
Burrow J G 683
Burton John.. .... 679 680
Carman R W..... 682
Carmody J D..... 682
Chandlee Geo F..... 680
Chitty H E..... 684
Clark B L 687
Connelly John J 683
Corbrey T J & Co...680 681
Davis R & Sons. 680
Devine's Roller Wks.. 681
De Lamater Iron Wks. 681
Dillon J L..... 688
Dreer H A.....683 686 687
Elgin Rose Co..... 684
Elliott W H..... 680
Ellison Wm..... 680
Evans Charles F & Bro 678
Faust H G & Co..... 683
Felheim Lyman..... 689
Field S B..... 684
Gardiner J & Co....687 688
Gardiner Jno G..... 686
Gibson J C..... 686
Gonzalez & Co..... 688
Hall Ass'n..... 680
Hales H W 683
Hammond Benj..... 688
Hancock Geo 685
Hart James 681
Hart Michael A 681
Hartford H E..... 680
Helmi Jos..... 680
Herendeen Mfg Co.... 681
Herr Albert M..... 684
Hews A H & Co..... 680
Hilfinger Bros..... 680
Hill E G & Co..... 683
Hippard E 679 680
Hitchings & Co..... 682
Hooker H M Co..... 680
Horan Edw C..... 681
Horan James..... 685
Hulsebosch Bros..... 679
Hunt E H..... 681
Hunt M A..... 679
Hunter & Purdy..... 681
Jeffords J E & Co..... 680
Jennings E B..... 685
Joosten C H..... 688
Kaufmann Ernst & Co.680
Keunicott Bros..... 681
Koffman F 686
Kroeschell Bros..... 691
Kuehn C A..... 680
Larkin Isaac..... 685
La Roche & Stahl..... 681
Little M B 687
Little W S & Co 687
Lockland Lumber Co... 691
Lombard R T..... 685
Long Dan'l B..... [illegible]
McBride Alex..... 685
McCarthy N F & Co.... [illegible]
McFarland J H..... [illegible]
McFarland J H Co..... 684
McGowan John..... 685
Manz J & Co..... 680
Marschnetz & Co..... 680
May John N 686
Michel Plant & Bulb Co 686
Milliang Bros..... 681
Mitchell E M..... 685
Moffatt G J..... 685
Moninger Jno C..... 692
Moon Samuel C..... 688
Moore Frank L..... 679
Myers & Co..... 691
Nanz & Neuner..... 679
National Fibre Co ... 684
National Plant Co..... 683
Niles Centre Floral Co. 681
Olson M..... 681
Ouwerkerk P..... 688
Page M E Jr 682
Peck & Sutherland..... 681
Pelree & Coleman Co.. 684
Pennock C J 685
Pennock F M..... 684
Pennock Sam'l S. 681
Pierson A N..... 688
Pierson F R Co..... 683
Pittsburg Clay Mfg Co. 690
Powell W S & Co..... 687
Randall A L..... 681
Renard Joseph..... 684
Rieman H W 687
Rimbaud Benj..... 683
Roberts D H..... 691
Roehrs Theo..... 681
Roemer Fred 688
Rogers Nurseries..... 688
Rolker A & Sons..... 683
Russell Governor 685
Russell S J..... 680
Salter Bros..... 679
Salzer John A 687
Sander & Co..... 684
Schulz Jacob..... 679
Scollay John A..... 691
Sebire P & Sons..... 687
Shelmire W R..... 685
Sheridan W F..... 681
Siebrecht & Wadley.... 684
Siptle Doepfel & Co.... 690
Situations, wants. 692
Smith C A Floral Co. 681
Smith W E..... 680
Spooner Wm H..... 679
Stark Bros 679 688
Starr Chas T..... 685
Steffens N..... 680
Stott Garden Imp Co .. 680
Struck J N & Bro..... 689
Styer J J 685
Sunderbruch H L..... 680
Swayne Edw..... 684
Swayne Wm..... 685
Telfentiul Oscar 685
Tricker Wm..... 686
Ulbricht F J..... 687
U S Wind Engine & Pump Co..... 689
Vaughan J C..... 686
Washburn Andrew..... 685
Waterbury Rubber Co. 689
Watson B M..... 686
Weeber & Don..... 685
Welch Bros..... 681
Wells & Coutan Co.... 690
Whilldin Pot Co..... 690
Wight W P..... 691
Wilks S Mfg Co..... 691
Winter N B..... 682
Wisconsin Flower Ex.. 680
Wood Elijah A..... 687

Goodell III
Mass Agri Col
15 Dec 93

Do YOU WANT an alphabetical list of chrysanthemums in commerce in America, with class and a brief accurate description of each one, and synonyms noted? You will find such a list in our new trade directory and reference book.

GREENHOUSE HEATING AND VENTILATING

Horticultural Architecture and Building.



HITCHINGS & CO.

Established 1844.

233 Mercer St., New York.

FIVE PATTERNS OF BOILERS.

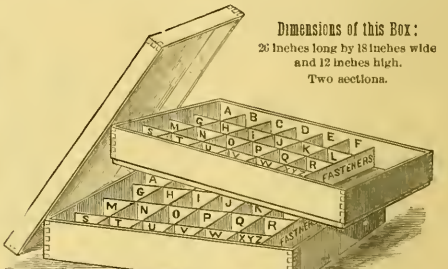
NINTEEN SIZES.

Perfect Sash Raising Apparatus.

Rosehouses, Greenhouses, Etc., of Iron Frame Construction, Erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frams Benches with the "Perfect Drainage Bench Tile" or Slate Top.

SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUE.



Dimensions of this Box:
26 inches long by 18 inches wide and 12 inches high.
Two sections.

With an order for 500 letters, we furnish a box made of wood nicely stained and varnished, such as is represented in the cut.

BOSTON FLORIST LETTER CO.

Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1½-in. and 2-in. 2.00 per 100. Patent fastener with each letter.

OUR NEW SCRIPT LETTER, $4.00 per 100.

F. McCARTHY, Treas. & Mangr. | Address 13 Green St., Boston, Mass.

Address all correspondence to 1 Music Hall Place.

We have a new FASTENER which we consider a decided success. Any customers having old style fasteners which they wish to exchange, can do so without additional cost by writing us.

AGENTS:

Marschnetz & Co., 25 N. 4th St., Phila., Pa
A. Rolker & Sons, New York.
F. E. McAllister, 22 Dey St., New York.
A. D. Perry & Co., 33 Warren St, Syracuse, New York.
E. Kauffman, Philadelphia, Pa.
H. Bayersdorfer & Co., Philadelphia, Pa.
A. C. Kendal, 115 Ontario St., Cleveland, O.
J. A. Simmers, Toronto, Ont. Agent for Canada.
E. H. Hunt, 79 Lake St., Chicago, Ill.
Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.
H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O
T. W. Wood & Sons, 6th and Marshall Sts. Richmond, Va.
Jas. Vick's Sons, Rochester, N. Y.
C. A. Kuehn, 1122 Pine St., St. Louis, Mo,

These Letters are handled by all the Wholesalers in Boston.

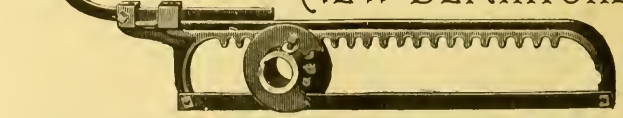
CYPRESS GREEN HOUSE MATERIAL

CLEAR CYPRESS SASH BARS

HOT BED AND VENTILATING SASH

JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

THE PEOPLE USE THE "NEW DEPARTURE"



SEE WHAT THE PEOPLE SAY:

BLOOMINGTON, ILL., February 8th, 1893.

MR. J. D. CARMODY, Evansville, Ind., *Dear Sir:*—The ventilating apparatus purchased of you last September has since been in use, *and we like it.* It works nicely. Our house is 150 feet long. It raises 13 ventilating sashes easily, quickly and uniformly from one end of the house. There being no twisting of the shaft. We have other kinds of ventilating apparatus in use, but consider yours much better than any other kind, and shall want more of them next season. They are very easily put up, need no oiling and cost less than other kinds. Three additional points in their favor that all who use ventilating machinery will appreciate. Yours truly,

ANDREW WASHBURN.

J. D. CARMODY, Evansville, Ind.

THE GREAT **ANTIPEST.**
For particulars, see next week.
R. W. CARMAN, GEN'L AGT.,
291 Amity Street, FLUSHING, Queens Co., N. Y.

When writing to any of the advertisers on this page please mention the American Florist.

THE AMERICAN FLORIST

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol VIII. CHICAGO AND NEW YORK, FEBRUARY 16, 1893. No. 246

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company. Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,

322 Dearborn Street, CHICAGO.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis, Mo., August 9 to 12, 1893.

CONTENTS.

Cut flower exchanges 693
Relations between grower and dealer 694
The late W. D. Brackenridge (portrait). 695
Stove, greenhouse or bedding plants. 695
Prices of cut flowers 695
Carnations—Seasonable hints 696
—Marketing cut flowers 696
Chrysanthemum Alba Venus (with illns). . . . 696
Miscellaneous seasonable hints 696
Hybrid cypripedium 697
John Goode (with portrait) 698
Dendrobiums 698
Washington 699
Boston 699
Philadelphia 700
New York 700
Toronto 700
Chicago 700
St. Louis 700
Obituary—Alexander Murdoch 701
News notes 701
Recent legal decisions 701
The seed trade 706
—Philadelphia seedsmen 706
Catalogues received 706
Some rose queries 706
Cincinnati 708
Begonia semperflorens rosea 710
Eucharis amazonica 710
Recent legal decisions 712
Heating with hard wood 714
Denver, Colo 714

THE MEETING of the American Carnation Society at Pittsburg next week promises to be of unusual interest and value to growers of the "Divine flower." The first day will be devoted to the exhibition of flowers of new varieties and the second day to the reading of essays and discussions of same. The evening of the second day the members will be the guests of the Pittsburg and Allegheny Florists' and Gardeners' Club, who have tendered them a banquet at the Hotel Schlosser, which will be headquarters during the convention. We shall give a full report of the proceedings in our next issue.

ARE YOU KEEPING such a record of blooms cut as will enable you to tell how much cash per square foot has been produced by each sort this season?

YOU CAN never invest $2 to better advantage than in a copy of our new trade directory and reference book.

Cut Flower Exchanges.

BY T. F. KEENAN.

[Read before the Chicago Florist Club, February 9, 1893.]

Gentlemen of the Chicago Florist Club:—In making these few remarks on the workings of Cut Flower Exchanges I have had to depend to a considerable extent on what information I could gather from the different Florists' Exchanges, or markets, throughout the country, my own experience covering but a few weeks. From this short experience, however, I have come to the conclusion that a florists' market in successful operation can not fail to be of great benefit to the trade in general. The benefits are many. It benefits the grower by enabling him to dispose of his stock each day during the early hours of the morning. It enables him to realize the cash each day on his stock disposed of. It enables him to keep better posted as to each particular variety or varieties and amount realized on same. His flowers are sold in a well lighted and comfortable room or hall. It is beneficial in an educational way by giving him a better opportunity to compare his stock with that of other growers, creating in him the ambition to improve same. It keeps him better posted on the market as to prices, supply and demand. The social features are many. Bringing the grower in direct contact with the retailer each day it creates a more friendly spirit which can not fail to be beneficial to all.

The Exchange will be particularly beneficial to the grower of plants; samples of stock would unquestionably find ready buyers if exhibited for sale in season.

The market will be of great benefit to the retailer. The large quantity and varieties of stock in the market enables him to compare stock and to buy to better advantage, as well as the great saving in time over running around from one commission house to the other as under the old system of buying.

The Exchange will also be of considerable benefit to the dealers in florists' supplies. Samples of stock can be exhibited in season and a great deal of trade reached each day at considerable less expense than if compelled to visit each buyer at his place of business.

I am of the opinion that the Exchange could be of considerable benefit to its stockholders by acting as their agent in the purchase of supplies needed by them, the large quantities of supplies wanted enabling the Exchange to buy much cheaper than the individual.

The Chicago Cut Flower Exchange was started to benefit the grower particularly. If the grower does not take sufficient interest in the Exchange to rent a table or send in his stock to the Exchange for sale on commission no practical benefit can be derived, as under the present conditions there will always be enough growers and dealers on the outside to prevent any uniform market.

One of the most aggravating features at present noticed in the Exchange is the policy of numerous growers who divide up their stock into several homeopathic doses, giving a small dose to the Exchange, another dose to one commission house outside, and still another dose to some one else, playing one commission house against the other. This policy can not be satisfactory to the grower or the commission man and will not give the best returns. The growers who make the cash are not those who are constantly changing.

Some growers say that they can not spend the time to sell their own stock in the Exchange, and that they can not afford to pay a man to do it for them. I am of the opinion that the best solution of this problem is for three or more growers to combine together and hire a man to sell their stock in the Exchange, pay him a moderate salary and as an incentive to push the business pay him a small commission on amount of sales. By combining I do not mean to pool the stock, but preserve each grower's individuality and sell his stock on its merits.

As soon as the grower can be induced to come into the Exchange no further inducement is needed for the retailer, as he will go where the stock can be found.

The commission man is a necessity in the Exchange to dispose of any surplus stock, and to attend to shipping and receiving consignments where the Exchange is not directly in this branch of the business.

If the entire wholesale trade of Chicago could be done under one roof there is no question as to the great benefit to all. The florists' market is yet an infant; it is certain to grow, the necessities of the trade demand it. The Exchanges in Boston, New York, Baltimore and Milwaukee are all in a sound financial condition and are proving a great success.

What the Chicago Exchange now needs is more growers. There are stockholders enough to make it the most successful market in the country. If each stockholder would take a little interest in it it would only be a short time until all the commission men and growers would be under its roof.

As far as the Chicago Exchange has now gone we have probably done as well as could be expected. About two thirds of the table space has been rented, and nearly $600 worth of advertisements are on the walls. The Exchange is paying expenses and all the dealers doing business in the Exchange are well satisfied with the results so far.

The blackboard of the Exchange can be made an object of considerable local interest. If you have any specialties or surplus stock to sell, or wish to buy,

advertise on the blackboard. If you need any help or wish a situation the blackboard is a ready means of attaining your desires.

I will now read you some communications from the officers of the different Florists' Exchanges which I think will interest you.

FROM THE NEW YORK EXCHANGE.

The management of our Exchange is in the hands of thirteen trustees. The market is open at 5 a. m. and until 9 a. m. We have a janitor who keeps the place clean, attends to the lighting and heating and keeps things running generally. Our charge for wall space to advertisers is 50 cents per square foot per year. The advertisers have the lettering done at their own expense. One side of the hall is let to bulb merchants and potters who have their advs. on the walls, and a bench below on which they display samples of their wares. For the bench space we charge 75 cents a running foot per month, and 10 feet is the most that is let to one individual. Members pay 65 cents a foot per month. The membership fee is $10 and each member must pay for at least two running feet of bench for six months in advance, and must take at least one share of stock in the Exchange, at $10 a share. No one is allowed to own more than five shares. No attempt is made to regulate prices, each seller acting on his individual judgment. Flowers unsold in the morning are generally left on sale in charge of the janitor. We have so far 150 members.

FROM THE BOSTON EXCHANGE.

Our association is formed of twelve growers. Capital stock $1,500, in 60 shares of the par value of $25 each. Our market is divided into 65 stalls or benches ranging in size from 3 feet by 15 inches, to 3 by 3 feet, and the rental is from $2.50 to $3.50 a month, with 10 per cent. discount to stockholders. We sold the pick of the stalls at auction and realized $200 from the auction. Each grower sells his own flowers. Market open from 6:30 to 10 a. m. at present. No wholesale dealers in market.

FROM THE MILWAUKEE EXCHANGE.

The object of our Exchange is to make money by doing away with useless expenditure of time and labor, and it has proved of very considerable advantage in this respect. The Exchange acts as a broker, and not only sells, but buys for its members. In purchasing, the members make out their orders, and these are combined by the Exchange, and the order placed at one time, resulting in a considerable saving through lower rates secured on a large order over smaller ones. The charge to members for purchasing is 10 per cent. and for selling, 15 per cent. In the handling of cut flowers we try to place as large a share as possible of our regular consignments on standing orders. Such orders are packed and counted by the grower who is practically in direct communication with the buyer. Complaints regarding quality of stock are referred from buyer to grower and back. If the Exchange finds the two cannot please each other, the order is placed with another grower. By this means the stock is sold on its merits, and the individuality of the grower is preserved, while the advantages of centralization of supply are attained, together with a saving in expense of handling, rent, book-keeping, etc.

FROM THE BALTIMORE EXCHANGE.

Our Exchange is a stock company, shares $5 each, and no one person is allowed to hold over 3 shares, and each shareholder has only one vote regardless of the number of shares he holds. We charge 10 per cent on sales for stockholders, and 15 per cent. on sales for others. We employ a manager who attends to all the business of the Exchange and makes a daily report to the secretary. The stockholders meet annually and elect a board of managers, consisting of seven members, of which four must be growers and three dealers, and who hold office for one year. The board elect the officers, and a committee of three, known as the "price committee," who fix prices from time to time as they deem changes are warranted by the fluctuations in supply and demand. It is important to have a capable and reliable manager. Consignments received are credited to the various growers when the flowers are sold and accounts are settled weekly. We make it a condition that the whole product of the growers be sent to the Exchange, with the exception of what may be retailed at their place of business. Those who consign only a share of their product to the Exchange are charged 15 per cent. on sales whether they be stockholders or not. The only trouble we have encountered is to convince all growers they are being fairly dealt with. The best stock naturally sells first, and often one man may consider his stock as good as another's when the buyer is not of the same opinion, and he charges failure to sell to favoritism instead of to off-quality of his stock.

Gentlemen, I think you will agree with me after hearing these communications, that there is a place for the Exchange. I sincerely hope that the time is not far distant when we will see the entire wholesale trade of Chicago in the Exchange, united for mutual benefit.

Relations Between Grower and Dealer.

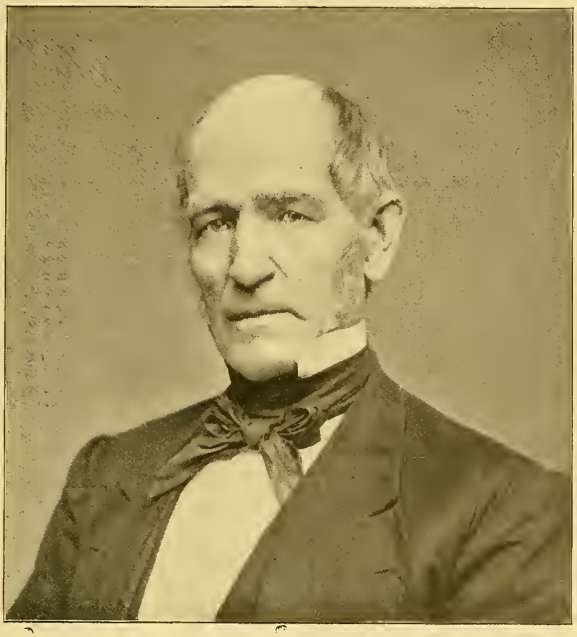
BY C. TIDY.

[*Read before the Gardeners' and Florists' Association of Toronto, Ont., February 7.*]

I have been asked to read a paper on the relationship that should exist (to the profit of both) between the wholesale and retail florists of Toronto. In order to make myself clearly understood I must go back a few years. In the year 1886 it was almost an impossibility to fill an order in the city for one or two hundred roses of any specified color without having to send away for them, and if we should get a funeral order to any extent it meant to hitch up your horse and travel around the city and outskirts to scrape up all the white flowers possible, no matter what kind. The result of this scarcity led some of our local growers to think over the matter, and as Toronto was in a very healthy condition, and money plentiful, and demand good, they saw a pretty sure thing in going into the business on a large scale, and to all appearances they were not far short in their calculations, for they are increasing their glass and raising prices every year. Until within a few years Toronto had been able to use all the flowers these growers could produce; but as their establishments kept growing and Toronto trade fell off considerably it is now looked upon as a poor market, and most of the prime stuff is sent to Montreal and American border cities where they do not kick when the growers think fit to raise the price on them without giving more than one day's notice. To fully illustrate to you the little respect growers have for this market I must call your attention to the store opened on Yonge street last fall by one of them, and the common talk of the good retail trade carried on by the other. This in my opinion goes to show that these so-called wholesale men care very little for the trade of the retailers of this city who have bought from and supported them in past years. Now they have come into competition with those who have to (in a manner) rely on them for flowers to carry on their business. But does it not show you that something should be done to help trade along, and regain the confidence of the public, and that a good feeling should exist between the grower and retailer? Is it not to our mutual advantage that we should be honorable towards each other?

What I would suggest is that the growers and retailers meet after one of our regular meetings, and be prepared to average up the prices of this winter, or last, and see if it could not be arranged to have, say, four changes of prices in the year, and figure so as to make the two totals about the same; then we should know just how long the prices would remain as they were, and when they would go up or down, as the case might be. We could then talk intelligently to our customers; but now if they want to place an order ahead we can not tell whether they will be cheaper or dearer, and of course look like fools, and as if we did not know enough to run our business properly. And again would it not be better for our growers around Toronto if they receive an order from a private individual to take it and tell them that such a firm would attend to it, and it should be his roses. The customer would be just as well pleased; the retailer would be happy; and the grower would sleep the sleep of the just that night, and could say to himself "I may be a dollar or so out on that deal, but it is square," and undoubtedly the retailer will remember this when stuff is plentiful, and would not the customers think, well, there is honor even among florists. And again will this not prevent another evil that will certainly arise; growers will spring up like mushrooms and flowers will be (with the exception of two or three months in the year) a drug on the market, for I do not think it is safe for the growers to count on outside markets too much, for will not some enterprising man or men in Montreal or thereabouts soon see that the money which is being sent to Toronto yearly might as well stay at home, the same as our growers saw a few years back?

Let me tell you a story about a firm (not a hundred miles from Toronto) who used to supply all the towns and villages within an area of 50 or 75 miles around their place with bedding and all kinds of pot plants. Everything went nicely for a while, they sold clean out every season, and did not care a cent about their home market. The result was that other firms sprung up in their own town and took all the home trade, and in a few years there was hardly a place where this firm had been shipping to but had its local florist. They then turned to their home market, but alas, it had no use for them. Others more anxious to look after the people's interests than they had taken all their trade away, and eventually this firm (like the little pig in the fable) was gobbled up and went out of existence. Although I have no such fears for our growers it is still worth their considera-



THE LATE WILLIAM D. BRACKENRIDGE. [SEE PAGE 678 LAST ISSUE.]

tion, for if there is anything in our climate or soil which go to making the quality of our roses better than those of our American friends will not some of the enterprising men over there likely think of growing roses here to supply their own market? I may be over-reaching somewhat, but there is the danger just the same. I would suggest that our growers deal fairly with us, and see that the home market is supplied with good stuff, and plenty of it.

It used to give me considerable satisfaction to answer my customers when they would ask me if these were imported roses, by telling them they were grown by our own men, and right around Toronto, and made no bones about mentioning their names and giving their addresses and suggesting that it was well worth their while to go out and look at the roses growing. Of course I did not mistrust for a moment that some day those growers would reap the benefit of my personal advertising, for I thought surely we are as good and honorable as our American cousins, for well do I remember a few years ago when I went to New York to buy cut roses for a customer of mine, going out to J. N. May's, and while out there asked him if he could supply me with roses, but he said you can get my stuff from Thos. Young, Jr., New York. Even though he might have saved his commission on about $200 he did not hesitate a moment. I certainly do think that if we would have our business and ourselves respected we should act with honor and justice towards each other. Then we would be better able to face hard times, and we would grow in our own estimation and that of the public generally.

I wish it to be distinctly understood that these thoughts and suggestions are not actuated by any personal jealousy or ill-feeling; but you must remember that this paper is not like an essay on how to grow certain plants, or anything of that sort, but of a far more delicate nature, and in which it would be almost impossible to make myself clearly understood without drawing comparisons and giving illustrations that may incur the displeasure of the grower, something I should be very sorry to do, as I wish to retain their good will in the future, as I trust I have done in the past—aye and more so.

[Some notes on the discussion that followed the reading of the paper will be found in our Toronto news letter.—ED.]

Stove, Greenhouse, or Bedding Plants.

A Query.

Rather a difficult question is submitted to us by a correspondent, who asks us what is meant by hothouse, stove, greenhouse and bedding plants. Our correspondent asks: "What are the varieties coming under each head? Where is the limit of the one and beginning of the other division? Can there be any positive division between greenhouse and bedding plants?"

To begin with the distinction between stove or hot house and greenhouse; the first two may be called synonymous, although many amateurs call all conservatories, warm or cool, hot houses. A stove is any glass house kept constantly at a high temperature for the convenience of plants from the warmer tropics, such as the East Indies, Malaysia, Central Africa, and the warmest localities of South or Central America; a place where the winter temperature is not expected to fall below 65°, while its average mean temperature may be fully 10° higher or more. On the other hand, the greenhouse is not supposed to be above 65°, while its night temperature in winter may be as much as 20° cooler.

While it is almost impossible to make any hard-and-fast rules defining the limits as to stove plants, it is safe to assume that any plant habitually thriving in a temperature lower than 65° does not belong to this section. As typical stove plants we have many of the East Indian or African orchids, dendrobiums, vandas, ærides, and angræcums; nepenthes, many varieties of alocasia and maranta; anthuriums, crotons, ixoras; sonerilas, bertolonias and Cephalotus follicularis. The last three are so essentially stove plants that they cannot be exposed in an ordinary exhibition hall without being protected by a glass case. A variety of palms and ferns requiring a high temperature might be added to this list.

The distinction between greenhouse and bedding plants is rather difficult to draw, since all bedding plants (from which class we except annuals and herbaceous plants) may also be greenhouse plants, yet all of the greenhouse class are not bedding plants. We think the fairest and most accurate plan is to describe as bedding plants only what the trade calls "soft stuff"—that is, geraniums, verbenas, coleus, alternantheras, heliotrope, etc.; those plants that are simply to be planted out for one season only, being carried over for stock, and renewed by cuttings each year. The greenhouse section should comprise such stuff as camellias, azaleas, cyclamens, ferns and palms not requiring a temperature above 65°, ericas, cytisus (genista), dracænas, pandanus and begonias. Orchids are usually classed by themselves, but quite as many of this family belong to the greenhouse as to the stove section.

Prices of Cut Flowers.

I believe that the very high prices at Christmas are injurious to the trade, and believe that they will cause the Christmas trade in cut flowers to dwindle down to almost nothing. I venture to make the assertion that it is uncalled for and unreasonable; a remedy, I think, can be very easily effected. In starting I would ask a few questions.

Is the selling of cut flowers according to the supply and demand? If so, why doesn't the retailer come down on his prices as well as the wholesaler? If roses are plentiful let them be sold cheap; if scarce let the market fluctuate and change accordingly.

Does the wholesaler charge according to supply and demand? I venture to state that in many cases he does not. For instance: Carnations have been scarce all winter in St. Louis. Certain parties have wholesaled them at $1.25 to $2 per 100 when they should have been sold at $3 to $4 and retailed at 75 cents to $1 a dozen.

Carnations can be retailed at Christmas easily for $1 a dozen with no complaint, or very little, from the buyer. They are receiving good value for their money for this season; they last and keep fresh longer than roses. Roses at $2 per dozen at Christmas, or $3 for very fine Mermets, Brides and La France, no higher, would be ample price.

The grower should get 8 cents for his Perles and Niphetos, 12 cents for his

Brides, Mermets and La France. If we would sell our roses at Christmas at these prices both the retailer and grower would be satisfied, and more especially the public, whom we must study if we want their patronage.

The most important problem yet to be solved is how to insure the grower a fair and reasonable price for his flowers for the balance of the season. A very easily solved problem if only the florists in every city will unite as one and agree on the prices of flowers among themselves, just as the grocers do.

Say, starting with September 15, until December 15, let the prices of roses at wholesale be $4 to $6 per 100. Retailers can then sell those that cost $4 per 100 at $1 a dozen, and those that cost $6 per 100 at $1.50 to $2 per dozen. Then from December 15 until Easter let roses remain at $8 to $12 per 100, charging at retail $2 to $3 a dozen. In summer let roses be sold at $3 to $4 per 100, and retailed at $1 a dozen. As well as protecting the grower and the retailer we should protect our trade and confine the sale of plants and flowers to the florists, and not to groceries and dry goods houses, who instead of increasing the trade of the florist tend to bring it into too common a roadway. Let us protect ourselves by confining our trade to its legitimate course. C. W. WORS.

St. Louis.

AMERICAN CARNATION SOCIETY.

EDWIN LONSDALE, Chestnut Hill, Philadelphia, president; WM. SWAYNE, Kennett Square, Pa., vice-president; C. W. WARD, East Moriches, N. Y., treasurer; C. J. PENNOCK, Kennett Square, Pa., secretary. The second annual meeting at Pittsburg, Pa., February 21 and 22, 1886.

Seasonable Hints.

In growing carnations, as well as many other things, we are not always sure of success. We should be prepared at all times not only to be philosophical and calm in the face of failure but to have something to take their place in case an unforeseen accident should befall the plants. Disease, insects, our own imprudence or mismanagement may destroy our prospects and render the plants worthless. The wise man will provide for such an emergency and be prepared to substitute some crop that will at least partially reimburse him. The expenses of running a greenhouse in the winter season goes doggedly on crop or no crop. Failure, however, is not likely to be general with watchful care. Some varieties will fail us, however, in spite of all we may do; and here and there a plant may die out from some unknown cause. But even if our plants are doing their best there are a number of other crops that may be grown with them with profit and without detriment to the carnation plants themselves.

The farmer grows pumpkins, beans, melons, etc. as "stolen crop" in his corn field, and there are a variety of plants from which the carnation grower can choose to fill up his vacant benches or cultivate as "stolen" or accessory crops. First in importance comes the tomato. For our purpose the tomato seed is sown in flats in early or middle November. When large enough they are potted in 3-inch pots, using rich earth, and carried in a warm and light place until wanted for planting on the benches. The variety we prefer for this purpose is the Mayflower. Many growers, however, use the Trophy and Lorillard. The condition of our carnations governs the time of sowing the seed and setting the plants. If our plants are doing well we do not wish to have the tomatoes come on too early. About the last of January in that case is early enough to set them on the benches. They should then be a foot high and in no danger of being smothered by the carnation plants. We set them in every third row. Two rows on the wide middle benches and one row on the side benches. A place growing 10,000 to 12,000 carnations can use about 500 tomato plants. It will take some time for these tomato plants to shade the carnations very much and as the sun is constantly getting stronger the shade is not at all detrimental. It is important, however, to keep up a good heat. As near as possible 60° at night. If the houses drop below 50° the tomatoes will get yellow and do little or no good. W. R. SHELMIRE.

Avondale, Pa.

Marketing Cut Carnations and Other Flowers.

In response to the questions asked by Mr. F. M. Pennock, on page 643, from my experience as a grower and retailer I would answer both in the affirmative. To further test the advisability of selling all cut flowers by their names, as far as practicable, I am running an advertisement in one of our daily papers, in which I call attention to one or two special things, coupled with their proper names, for a few days, then change off to something else. So far I find it very satisfactory, not so much as yet, from a pecuniary standpoint, as in creating an interest by exciting the curiosity of my customers, for they conclude if the flower is worth a special notice it must be something more than ordinary and they want to know all about it. It is the case in this city, and I suppose the same in others, that a large proportion of the trade in cut flowers is through the telephone. By educating the flower buying public to become familiar with the names of different varieties we are at the same time simplifying the business, for it is much easier to fill an order if Mermet or Bride roses or Silver Spray or Portia carnations are specified, instead of pink, or white, or red, or perhaps you are asked to "send the kind of flowers you sent before," you have forgotten what you sent in the last order, but the name tells just what your customer wants.

I believe that grading cut flowers is of paramount importance where you wish to build up a paying trade and gain the confidence of your customers. By always sending them the best they learn to depend on you for choice flowers and will not object to paying a fair price. It goes without saying, that it pays better out of two dozen carnations, or any other flower, to select one dozen and sell them at a profit (even if you throw the other dozen away) than to sell all at a price which barely covers the cost of growing.

Another point in the successful management of a retail trade is care and taste in packing, using boxes to fit the order, not so large that after the flowers are put into the box it looks as though the bottom had fallen out, nor so small they are crushed and bruised by crowding them into a space too small to hold them, but take a box so that when they are nicely arranged each flower will show to the best advantage, and if mixed flowers with a few ferns and choice little things on top so when all are in the box has the appearance of being just comfortably full. When the recipient of such a box opens it it is with a pleasant surprise not easily forgotten. By following this course it will not be long before you are told by your friends that you have the reputation of having the choicest collection of cut flowers in your city.

Unfortunately in almost every town large enough to support several greenhouse establishments there are one or two florists, who, with a view of monopolizing the trade, pride themselves on their low prices, but these men, as a rule, rarely estimate or realize the cost of growing their stock and are not particular as to the quality or in what shape it is sent out. Their customers are usually of that class of buyers who are always on the alert for bargains and with whom quantity and bulk is of more consequence than quality. But your customers are the paying ones; they are discriminating and do not object to paying your price, provided they get the best and just what they want. R.

DAYBREAK CARNATION.—Mr. E. Haentze, Fond du Lac, Wis., sends us a dozen blooms of Daybreak that would be hard to beat. The color was unusually fine, and the blooms were of good size and perfect in form. This variety evidently does exceedingly well with Mr. Haentze.

Chrysanthemum Alba Venus.

This is a seedling from Lucrece, raised by Nathan Smith & Son, Adrian, Mich. It is very dwarf and early, coming a few days after Gloriosum. The petals are reflexed and very much notched and toothed after the style of Elkshorn, but to a more marked extent. The white flowers resemble bunches of Angora wool.

Miscellaneous Seasonable Hints.

We are sowing this week the seeds of three plants that we use largely for centers of vases and veranda boxes. They are Dracæna indivisa, D. australis and Grevillea robusta. They are all very easily raised from seed and very useful plants. Grevillea stands an awful lot of rough usage, grows rapidly, and often takes the place of a valuable palm in decorating.

If you want a few extra early asters, sow some now, but it is *too early* by a month to sow the general crop of summer annuals, such as asters, phlox, balsams, etc.

We are propagating just now begonias of different varieties, such as metallica, Ober, etc. Grown along in a temperature of 65° they will make fine useful plants by end of May. It is late now for Begonia Rex. They should be propagated as soon as you begin to fire steady in the early winter, say middle of November.

If you don't want to grow standards or specimen chrysanthemums, put off propagating for another month at least, (unless you are very short of some valuable variety). When propagated so early they have to be kept shifted and occupy lots of room, and if you don't give them more pot room they get hard wooded and are then useless. It is safe to say that the thousands of fine flowers, premium winners all over this country,

CHRYSANTHEMUM ALBA VENUS.

were cut from plants propagated as late as May and even June.

Just about now is the right time to shift show pelargoniums into their flowering pots, which with me is a 5 or 6-inch. Some are much stronger growers than others. How seldom you see a batch of these fine showy plants now-a-days. We grew them in this city very largely 20 years ago, but the great perfection to which the zonal pelargonium was then brought, retired the old fashioned pelargonium to the back ground. Still they should be grown. Like other florists' flowers there has been an enormous improvement in them within 15 years. August is the time to begin with pelargoniums, and if I am allowed to contribute a continuance of these notes, I will have something to say about them. If you have any now, give them their last shift. They like a rather coarse, turfy loam with a fourth well rotted manure, and to be potted firmly. They like a cool, airy place and, as a growing plant, will thrive with the least water of any plant I know of. As the sun shines stronger more water is needed, and fumigate regularly, for unlike the zonal geranium, they are sure to be troubled with aphis. When in flower in April and May don't let the fire out and dampness in. There is no plant that suffers worse from dampness when in flower, than the show pelargorium.

The hydrangeas you lifted from the ground last summer, will have been resting in a very cool house or under a bench. It is time to give them a better place and bring them along very slowly. Hydrangeas pay us best here to have in flower in middle and end of May. Those you lifted don't need a larger pot this spring, but top dress them with an inch of good rich compost. As the young growths push out, rob each plant of a cutting or two for next year's supply.

I have had uniformly good results with lily of the valley this winter, and my roots came from half a dozen different sources. I have forced them several different ways, and have come to the conclusion that for those who grow 500 to 1000 a week, there is no plan more satisfactory than forcing them in flats. I use flats 2 feet by one foot, and 3 inches deep, and any ordinary potting soil is used. They are covered with one inch of sphagnum. The flats are placed on three 4-inch hot water pipes, and watered once every day. When the bells begin to open, remove the flat to a cooler place; an ordinary rose house temperature is about right; give them all the light you can, except the brightest sunshine. Every bell will open, and they will be larger and better than those grown in a warm bed of sand where they must stop until they are cut.

Buffalo, N. Y. WILLIAM SCOTT.

WHEN writing our advertisers please use one of your printed business letter heads or enclose your business card.

Hybrid Cypripedium.

ED. AM. FLORIST:—Veitch's Manual, Vol. IV, page 88, names Cypripedium Lathamianum as a hybrid raised by Mr. Latham of the Birmingham Botanical Gardens by crossing C. Spicerianum with the pollen of C. villosum, and Veitch gives a pretty full description of C. Lathamianum.

I have raised a hybrid from seed, just exactly the reverse of the above cross, viz., C. villosum fertilized by C. Spicerianum, and it is now in bloom at my conservatory, No. 1814 Belmont avenue, Chicago. The plant is very vigorous and the flowers are large and handsome. I shall inclose a written description of the plant and flower, which I hope you will publish, with the view of learning if this hybrid has been raised before, and, if so, under what name it has been disseminated. The flower differs in many particulars from C. L., and, judging from printed description of the latter, must be superior in beauty.

Cypripedium villosum by C. Spicerianum (sown in 1887, I think).—Growth vigorous, blooms first time with 6 growths, one flower each, January 20, 1893.

Upper sepal white with dark purple mid-line, bright, beautiful yellowish green at base, ⅝-inch in depth; sepal 2⅛ inches high; flower sepal greenish, near villosum. Petals 2½ inches long, barely 1 inch

wide at the widest part, spatulate, elegantly fluted on upper edge, similar to cut, Veitch Manual, IV, page 89 (C. elegans superbum); superior half, color trifle richer than villosum, but similar except towards the apex and on fluted margins, where it is tinged yellowish green; inferior half, pleasing bright yellowish green, almost a yellow; mid-line dark.

Lip, Spicerianum in shape, but color near villosum.

Staminode, intermediate between parents, but bossed (not flat in front like villosum) and nearly all the front suffused with old rose or crushed strawberry color, having in the center a small bright light green callosity (all lively and with character).

Flower larger than villosum and brilliant; scape, 13 inches long, slender, villous; bract, dark-mottled in lines, with character; capsule rendered crimson by villousity.

Leaves, 15-16 inches long, of a lighter green than either parent and intermediate in shape, showing faint netted veining with the characteristic spotting of villosum at base. WM. H. CHADWICK.

Chicago.

John Goode.

We present in this issue a portrait of Mr. John Goode, who is the oldest living Chicago florist. Mr. Goode was born in Enfield, near London, England, in 1813. He was at an early age apprenticed to the trade of joiner and cabinet maker, but before the term of his apprenticeship expired, he had through an inborn love gained considerable knowledge of plants and their culture. At the close of his term he entered the nurseries of Cormack, Son & Oliver, at Deptford, and followed this by a course at Earl de Grey's seat, under the celebrated Davie Douglass. At this period he entered into the nursery business with his brother Thomas, who now lives in Chicago.

In the spring of 1845 he came to the U. S., and by way of the canal and lakes to Chicago. Until 1847 he and his brother followed gardening in Chicago, laying out the grounds at the residence of J. Y. Scammon, where the Dearborn Block now stands, doing also similiar work for Justin Butterfield, Esq., and Horatio G. Loomis, Esq.

During the next two years they were occupied in starting and developing the Sheffield Nurseries, under the agency of W. B. Ogden. This was the first Chicago nursery, and was located between Racine and Southport Avenues, and North Clybourn Place.

In the fall of 1849 Mr. Goode, not being able to see the evidences of future greatness for Chicago, built himself a house boat to carry him and his family to new fields. The boat was frozen in at Randolph Street for two weeks, and received a great deal of attention from press and public during that period. After an eventful voyage down the Canal Mr. Goode decided to pitch his tent in St. Louis, where he resided many years, engaged in landscape work. Among his works the laying out of LaFayette Park and the Fair Grounds stand conspicuous.

In 1865 he returned to Chicago and entered into the florist business. During the past seven or eight years he has spent his winters at his orange grove on Indian River, Florida, and within the last two years has retired from active business.

Mr. Goode during his long career has been known as a gardener in the true sense of the word. He knows his plants and their needs by intuition. His collection of Cacti and Succulent plants, of which he was proud, was before their dispersal the finest in the west. And his ardor is not yet damped; he can be found almost any time in his Indian River home garden, between sunrise and sunset, probably trying to hasten the opening of some seedling amaryllis, to the raising of which he has of late given some attention, and ready as ever to welcome the gardener who "knows plants."

Dendrobiums.

I am pleased to find that so good a gardener as Mr. David Allan has made a specialty of so fine a genus among orchids as dendrobiums. They are easily the most varied, the most beautiful, and the best adapted to this climate of any single genus among orchidaceæ. I fancy Mr. John Saul is another grower who has some leaning to this opinion.

As I have had experience of a few of their habitats, and quite considerable practice in their experimental growth and propagation, perhaps some interchange of notes may be acceptable to those even among professional growers, who are not entirely cloaked in the shoddy of egotism, and guided by the fallacies of rule of thumb.

A word or two as to their geographical distribution will prove that dendrobiums, like roses or any other large genus cannot all be treated alike, but nearly all do well—except perhaps a few of the hirsute section—which I suspect are sub-alpine in their environment, and like nearly all such plants, difficult to keep in health at the sea-level south of New York. Dendrobiums are found from Japan to New Zealand, and from Eastern Australia all throught Malaysia and Southern Asia to Western India—extending through both the Indian peninsulas well up to 6,000 feet of altitude at least. The yearly range of the thermometer for some few of the species is from 32° Fah., to 70°. For others it is not more than from 60° to 80°. These latter are species from the lower elevations such as aurea in Coorg and Ceylon, Phalænopsis in New Guinea, bigibbum in North Australia, and superbum in the Phillipine Islands, etc.

But although within certain limits the natural range of annual temperature is considerable, and often under cultivation even more considerable—yet this is as nothing when compared with the immense differences of climate in other respects. On the Western Ghauts of India, for instance, there are in some places from 100 to 200 inches of rain—or even more—during the four monsoon months. In other parts of the mountains of South India only 50 to 60 inches of rain are distributed through two separate monsoons extending over 7 to 8 months. In Khaysia N. E. I., over 1000 inches of rain have been recorded, and although this was perhaps abnormal—yet from the various sides of these hills from 300 to 800 inches has been the record since their discovery by the English. The mountains of India, Malaysia, and Polynesia, are very apt to be the dividing line between one monsoon and the other, and thus present on their opposite sides entirely different climates.

It will thus be easily understood how it happens that the various batches of a given tropical species of orchids are different in their habits and periods of growth. They present no especial botanical character, their climates—geographical character is utterly different. I have no doubt but Mr. Allan has observed these differences of habit in the various types of Dendrobium aureum, D. nobile, D. thyrsiflorum and many others—especially American orchids. Sometimes these climates contradict utterly and entirely the conditions prevalent in cultivation, but generally the orchids from northern latitudes are amenable. Take Australia—Northern Australia, subject generally to hot winds from the sandy deserts of its immense interior—yet it won't do to overdry Dendrobium bigibbum; it grows near the sea, the monsoon lasts from November to May with interruptions, and from June to September. There are such tremendous dews that it is impossible to keep iron or steel from rusting unless painted. This dewy period agrees entirely with its period of growth under cultivation. It is found at about 11° south latitude and probably some violence is done it, yet it is a most satisfactory dendrobe, so also is D. Phalænopsis—but why does D. superbiens do so much kicking?—it is the last to grow and the last to stop; does it continually want the range of temperature (75° to 87° Fah.) of its native country? If it does I fear it will always be a kicker in the Northern United States.

But I have already said more than I intended to say on a very extensive, and most absorbing subject, and enough I hope to convince insular practitioners that they can learn a very great deal more about their plants than they have ever dreamed or imagined, if they will only "work o' nights," and try to master a little—ever so little as they can procure, of botanical climatology.

I append a list of dendrobiums which do well under ordinary cultural conditions, with their growing months in Arabic figures, and their months of flowering in numerals.

	GROWTH.	FLOWER.
D. aggregatum	3-4 & 8-10	II
Ainsworthii	8-2 & 3-10	I
Aureum	1-10	I
Aur. Phillipense	10-7	XI
Aur. Zeylanicum	2-10	I
Brymerianum	3-10	IV
Bensoniæ	4-9	IV
Bigibbum & Phalænopsis	5-10	XII III
Crassinode	12-10	I II
Crepidatum	3-9	III
Crysanthum	10 9	II III
Chrysotoxum	5 11	III
Crystallinum	1-8	IV
Dalhousianum	4 9	IV
Dearii	3-10	IV
Densiflorum	4-9	IV
Devonianum	1-10	III
Farmerii	6-10	III IV
Fimbriatum oc.	5-12	I II
Findleyanum	3-8	I
Jenkinsii	2-4, 5 8 10	II
Japonicum	9-1 & 1-5	II III
Leechianum	1-9	I
Lituiflorum	1-9	II
Luteolum	2-9	I
Moschatum	4-9	V
Nobile	1-9 & 3-10	I III
Parishii	3-9	III
Pierardii very various		
Primulinum	2-8	I III
Superbum gig.	3-10	III
Suavissimum	5-11	IV
Tortile (various)	5-11	IV
Transparens	2-9	IV
Thrysiflorum	3-9 very various	
Wardianum	8-12 & 1-7	I II

This last species is very excitable when freshly imported.

I trust these notes may help admirers of this genus. The resting period of course commences when growth is complete—thus Aureum grows from January to

October and rests *completely* from October to January.

Jenkinsii (from Gaulpara) grows four or even five times a year—February to April, May to July, August to October, and October to November. Whenever it can pick up heat and moisture.

Trenton, N. J. JAMES MACPHERSON.

Washington.

The weather during the past week was not such as would please the florist. It has been dull and cloudy with occasional rains and snow, though not very cold; at no time was there more than 10° of frost. Owing to this and the prolonged cold spell of January flowers have been anything but a drug on the market. Roses are poor and many of the varieties, such as Perles, Beauties and Woottons, are coming very much deformed. The demand for flowers the past week has been good. This was probably due to the fact that this was the last week of the gay season until after Lent, as many of the society people held their final reception for the season. After this there will naturally be a lull in trade.

Brides and Mermets are bringing from $2 to $2.50 per doz., Perles $1.50 to $2 (good buds), Watteville $1, La France from $2 to $3 according to quality, American Beauties from $3 to $12, Meteors from $2 to $3, good buds with long stems will bring $4, Laings from $10 to $12, carnations 50 to 75 cents, valley 75 cents to $1, Harrisii $2 to $4. Violets are scarce and are bringing from $3 to $4. Tulips are beginning to be plentiful and are finding ready sale at from $1 to $1.25 per dozen. The pink varieties bring the highest price.

Postmaster-General Wanamaker gave his final reception last week, the decorations for which were very elegant. The center-piece was a large handsome silver dish filled with Cattleya Trianæ blooms, valley and Adiantum Farleyense, resting on a mirror which projected several inches beyond the silver and ferns, producing a rich effect. The decorations throughout the mansion were of adiantum and cattleyas except one room, which was decorated with Harrisii lilies and Asparagus plumosus.

Mr. and Mrs. John Lee Carroll gave a cotillion last Thursday evening. The Carroll mansion is a capacious one, the parlors of which make one of the largest private ball rooms in the city. Its illumination was added to by rows of candles along the walls, suggesting the parties of a hundred years ago. Flowers were used in profusion throughout the entire house. The mantels were banked with Adiantum cuneatum studded with La France roses. A group of large palms and pandanus screened the band, which was stationed in the bay window. The favors were decidedly novel and Frenchy. They were gorgeous Tosca sticks with mock jewelled heads, flutes wrapped in ribbon like great sticks of peppermint candy, banners mounted on long staffs, whistles, paper cutters, ribbons and flower favors. These last were American Beauty roses, cattleyas and dendrobiums.

Prominent among the most elegant entertainments of the season was the cotillion given last Tuesday night by Mr. and Mrs. B. H. Warder. It ranks unquestionably among the elegant private balls of the season. The dancers found a spacious ball room arranged for them in the use of the great hall and the drawing room back of it. The mantels were in each room decorated with roses and adiantum ferns. The pillars and chandeliers were twined with Asparagus plumosus. The decorations were entirely of white and pink. La France roses and pink carnations formed the pink in the decorations, while the white was valley and white lilacs. When the midnight supper was served the guests sat at 20 small tables, each of which had a crystal vase in the center filled with white lilacs, mignonette and pink carnations.

The committee in charge of inaugural ball room decoration propose making the coming affair as far as possible a flower decoration in honor of Mrs. Cleveland, who is a great lover of flowers. It is the intention of Mr. Small to outdo all previous attempts at ball room decorations in this country, so that the reception of

JOHN GOODE.

the President of the United States the evening of March 4th will be a notable one in many other respects than a mere promenade. Conversing with Mr. Small the other day he described at length the proposed arches at the north and south doors of the Pension Building. The arches will be 60 feet high and 30 feet wide, at the base of which will be stationed the orchestras. Inscribed over the arch at the north door will be the name "Cleveland," incandescent lights bringing the letters out in brilliant relief, while "Stevenson" will be the inscription over the arch at the southern extremity of the ball room. Placques of ivy leaves sprayed with roses and other flowers will be conspicuously displayed on a white cloth field. Within the placques will be shown an artistic arrangement of flowers of every conceivable variety. Emblazoned on escutcheons will be the coat of arms of the United States and of the various states of the Union. Surmounting the arches will be immense tropical plants, while the corners of the facade will serve for an elaborate display of flags of all nations.

The balcony decorations will comprise trailing vines of wild smilax over white cloth, and upon each of the 76 pillars will be a large green placque, from the center of which will be a burst of electric lights. Interspersed at intervals throughout these magnificent floral decorations will be silken banners hanging in graceful folds from the balustrade. In the center of the hall are eight immense columns, each 26 feet in circumference at the base and 90 feet in height, upon which Mr. Small's skill will be exerted with a view to making these monoliths more imposing.

It is proposed to use Commissioner Raum's office for the President's private apartment for this occasion, and a canopy effect will be carried out by means of white cloth, trails of Asparagus plumosus and the choicest and costliest orchids. Large vases of long stemmed Magna Charta and American Beauty roses will be conspicuous in the decorations of this room, while the big open fireplace will be concealed by an artistic combination of greens and choice flowers. C. LESLIE REYNOLDS.

Boston.

The subject for discussion at the February meeting of the Gardeners and Florists' Club was packing and shipping. The discussion was opened by Mr. D. Zirngiebel who gave descriptions of the various methods of packing as practiced in Europe for shipments to America as well as the methods prevailing here for local trade.

Mr. Robert Farquhar followed with an interesting description of the best manner of packing small plants, particularly for transportation by mail. He illustrated his instructions by means of boxes, plants and other material which he had brought for the purpose. As an example of successful packing he told of a box of cineraria flowers which had recently been sent to him from London, England, and which had arrived in perfect condition. Several other gentlemen participated in the discussion, which was very interesting throughout.

An incident of the evening was a characteristic speech by Mr. Edward Hatch in glorification of the committee on the recent dinner, and of their phenomenal management which resulted in their turning in a surplus of over seven dollars in cash, instead of showing the usual deficit.

The lecture before the Massachusetts Horticultural Society on Saturday February 11, on "Fungi, the latest discoveries relating to their connection with horticulture" by B. T. Galloway, chief of the division of Vegetable Pathology, U. S., Department of Agriculture, was somewhat of a disappointment for those who looked for anything in the way of new light on this most important subject. The essayist gave directions for the use of Bordeaux mixture, describing various methods of applying it, and explained the use of weather maps and methods of foretelling the weather thereby and that was all.

Bulletin, No. 20 of the Hatch Experiment Station of the Massachusetts Agricultural College is just out. It gives plain, easily understood descriptions of the canker worm, caterpillars, Tussock moths, their habits, and best methods for their extermination, and is illustrated with many cuts. It is a most valuable and seasonable document.

The cut flower trade has been generally brisk during the past week. The scarcity of roses and the unsalableness of bulbous stock are the main features of the market. Violets are quite plenty with prices reduced all around. The moderate weather which has prevailed has given a chance to the street fakers, who are out again in force, and their presence has had a very noticeable effect upon the carnation and violet trade.

Daniel Gormly, a well known florist, lost his wife by death on February 10.

Mr. A. H. Fewkes has some very fine seedling carnations.

Visitors in town this week Mr. C. B. Weathered of New York and Mr. A. T. Boddington of Short Hills, N. J.

Philadelphia.

Certain kinds of flowers have been positively scarce the past week, while business on the other hand has been very good. Choice roses of all kinds sold on sight, and carnations, particularly pink, were in great demand. All roses give way to the Brunner, for which there is a rare scramble; it helps to sell many another variety that would otherwise go begging. Anderson, Heacock, Burton, Lonsdale, Whitely, Smith and Price all have some, but not in quantity. Anderson will have a large house in the first week in Lent, and with some others that will be in to keep him company, there may be enough to go around. They have all sold so far this season for 75, as against 60 last year.

In general, prices are about the same as last week, Mermets, Brides, $8; La France, $10; Perles, Gontiers, Sunsets, $4; Wootons, Guillots, $4 to $6; Bennetts, $8 to $10; Beauties and Laings, $35 to $50; carnations, $1½ to $2; valley, $2 to $3; daffodils, $4; tulips, $4 to $5; freesia, $1 to $2; Romans, $3; smilax, $15 to $20; violets, $1 to $1½.

The second Assembly ball took place last Friday evening and showed a still greater falling off in the number of bouquets carried. It is with feelings of deepest regret that we note the decadence of the ball bouquet; it is an avenue of trade that is fast being closed. Time was when no flowers were too good, no price too great, to secure handsome bouquets for these occasions. But now Dame Fashion forbids; it may be she has some other place to help out; let us hope so at least. Flowers seem to be used to a greater extent at funerals of late and quite a number of elaborate pieces were made up the past week. The floral rug or mat placed on the floor under the casket is coming into use.

At the February meeting of the Florist Club it was agreed to have a dinner in connection with the spring show of the Pennsylvania Horticultural Society. John Westcott is chairman of the dinner committee, with Mr. Harris as first assistant; this insures a good time.

The question "resolved, that the growers have the best end of it" was after considerable discussion decided unanimously in the affirmative. Mr. Lonsdale who was to support the negative, not being present, Mr. Harris and Mr. Craig defended the grower. Mr. Craig thought the dealers as a rule wanted too much profit and should be satisfied with less and would then do more business and make as much, if not more money and also help the grower to get rid of the increasing stock.

H. H. Battles is just now going about on crutches; it is not a fad with him, but on account of a needle in one of his feet. The injury, while quite painful is not dangerous and he expects to be about in a day or two. K.

New York.

On account of the inclement weather there was a small attendance at the meeting of the New York Florists' Club last Monday evening. The proceedings were greatly enlivened by the presence of Alderman Morris of Jefferson Market, whose insistence on observation of strict parliamentry rules created much amusement. Mr. Ernest Asmus of Short Hills read a paper on decorative plants. The question box contained several enquiries on practical subjects which were replied to by various members present. Preparations are in progress for the first club exhibition. Messrs. Hews & Co., flower pot manufacturers, have promised a donation of vases for exhibition use and a vote of thanks was accorded them. The next smoker will take place February 25th on invitation of President Manda. Trade very lively, winding up the season before Lent comes in. Good sale for every thing except bulbous stock.

Toronto.

The Gardeners' and Florists' Association's special meeting held on Tuesday last for essays and discussions only, was a most interesting one, and well attended, considering that the thermometer stood at zero outside. Mr. Gilchrist gave his long looked for paper, "Hot water heating under pressure," which explains the system most clearly and concisely, and though perhaps there were no actually new ideas brought out, it is a system that has not been tried here yet (at least to any extent) so that the paper was listened to with intense interest. After the paper was read, Mr. Gilchrist had to answer many questions and make things clear with blackboard and chalk. I think there is no doubt that this system will be brought more into use here in the near future. This subject in this climate is of vital importance to gardeners and florists—especially to the latter, who have to pay for the fuel burnt, and as Mr. Gilchrist said, "it is of the first importance that we should have a scientific knowledge of how to get the most heat out of the least quantity of fuel."

I have sent you Mr. Tidy's paper on the relations between growers and retailers, thinking perhaps that some of your readers might like to know how matters stand here on this subject. [The paper appears elsewhere in this issue. —ED.]

There was a most lively discussion after it had been read, and Mr. Tidy had to stand the brunt of a storm of questions and objections but he stuck manfully to his guns. The discussion showed at times a tendency to fly off at a tangent into other grooves. Mr. Gilchrist thought that the whole trouble had been intensified this year by the very small amount of sunshine in November and December last year, (there were in the latter month only 20 hours out of a possible 100), and thought it was simply a question of supply and demand. Man had had since the time of Adam a streak of selfishness running through all his transactions which it seemed impossible to eliminate. Mr. J. H. Dunlop, referring to the quality of Toronto grown roses, thought that their superiority was accounted for more by the ability of the growers than by climatic influences. He said that his customers in outside towns and cities generally began dealing with him in September and kept on until the July following, whereas those in this city did not stick to him in this way. Mr. Muston thought there was a good deal in the paper that might be of advantage to both sides if they would all combine, but that was just the difficulty. The conclusion of this discussion was left over till next meeting. E.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

Chicago.

At the last meeting of the Florist Club an invitation was received from the Chicago Cut Flower Exchange to make the Exchange its headquarters in the future, free of expense to the club. After considerable discussion the offer was accepted and future meetings will be held at the Exchange, 45 Lake street. It was also decided to have a modest supper at every second meeting of the club, the same to be served at the meeting place, where there will be abundant room and facilities for serving it in a satisfactory manner. The Exchange will provide a banquet for the members of the club on the occasion of the first meeting in the new quarters (February 23) and invites the trade in general to also be present. Three new members were admitted to the club. The paper on cut flower exchanges by Mr. T. F. Keenan, manager of the Chicago exchange, appears in full elsewhere in this issue.

During the past week business has been very good indeed, and from the fact that some of the retailers are placing orders for their regular supply during Lent it does not seem as if that season was expected to seriously affect business. Roses, in all classes except Beauties, are a trifle more plentiful, but they continue to sell well, the stock usually being cleared out every day. Beauties are scarce, and very poor; at no time during this winter has there been any supply of really good blooms in this variety. A limited quantity of good Jacqs appeared this week, and from now on a steady supply is expected. A small but tolerably regular supply of Mme. Caroline Testout come in from one grower; they are magnificent flowers, large, and exquisite in color, far superior to La France or Albany. They are bringing $2 a dozen.

Carnations are, on the whole, good. It is worth noting that the dark crimson sorts sell only in limited quantities, compared with others. Tidal Wave is always in demand, the color being a general favorite. Daffodils are now quite plentiful, but sell well; tulips are much improved in quality. The Dutch hyacinths are showing more diversity of color; some very good pink ones are now in. Harrisii is a little less plentiful, but callas are coming in in quantity; they are better in quality than they were a week or so ago. Freesia and valley are both quite plentiful. Prices still continue the same; there has been little fluctuation during the past three weeks, and the trade seems in a more satisfactory condition than any previous time during the winter.

St. Louis.

Trade during the past week has been fair, taking into consideration the state of the weather. Most flowers have been in short supply but would immediately increase could we have a few bright days.

The regular meeting of the Florists Club occured Thursday the 9th, with a good attendance. After the minutes of the previous meeting were read and adopted the chairmen of the various committees were called upon to report. The committee to see that the proper care and attention be given Missouri's plants at the World's Fair made a partial report and were granted more time.

The report of the committee regarding the entertainment of the S. A. F., was read. They recommended that the Entertainment Hall be selected for holding the meetings, and that the trade display be

held in the corridors and rooms surrounding it. This it was thought would be the best place, taking all things into consideration, it being centrally located and easily reached from all the hotels as well as having all the most important car lines pass the building. They also presented a list of members for the necessary committees to take charge of the various matters that will occur from now until the convention is over.

After the adoption of the above report it was decided to lay over the reports of the remaining committees, with the exception of the one appointed to examine into the advisability of holding a fall show, so as to be able to give the matter full and thorough discussion.

The committee submitted a report that had been adopted at their last meeting, recommending the holding of a show to be conducted upon somewhat the same lines as those of the two previous years. Then Mr. John Young read a report representing the minority, and in it gave their experience in growing for the show of last year. They were very fortunate, capturing first with almost every entry, still when the premiums realized were compared with the value of the time put upon the plants there was a deficit of about $200. Had the competition been keener or had all the expenses incurred in growing the plants been charged against them there would have been a still larger deficit.

These figures caused much comment and surprise, as heretofore everyone had considered these winners well paid for their trouble. A general discussion ensued in which many and various opinions were advanced. Mr. Michel was of the opinion that it paid the grower to grow exhibition plants. Mr. Harry Young in reply said their only value was the premiums they might win, as they were entirely too large for sale, as well as too expensive for the general public to purchase. He thought therefore that the prizes should be at least three-fourths the cost of producing the plant. Mr. John Young also thought the grower could receive more value by placing the money lost in advertising. He said in conclusion that he did not wish to discourage holding a show, but he did wish to discourage the holding of one in which the premiums for chrysanthemum plants was as low as it had been in the last two held here, and he had expected by making his figures public to rouse the members to some action looking towards the increasing of the same.

The club was unprepared to take final action, and upon motion continued the committee with the suggestion that it formulate some means for reaching the desired end. R. F. T.

OBITUARY.

ALEXANDER MURDOCH, junior partner in the firm of J. R. & A. Murdoch, the well known Pittsburg florists, died at his residence in that city February 9, in his 53d year. He had been confined to the house since the holiday season, his death resulting from congestion of the lungs.

Mr. Murdoch was born in Pittsburg, his father being a florist, and received his early education in that city. He graduated from the State Agricultural College, after which he and his three brothers went into partnership with their father. Of the brothers M. B. retired from business and J. R. died in 1887, since when the brothers Jno. R. and A. have constituted the firm. Mr. A. Murdoch served in the army for three years during the war; he was secretary of the Ninth Regiment of Pennsylvania Reserves for years, and attended to the business matters connected with the erection of the soldiers' monument at Gettysburg. He was one of the directors of the Homewood cemetery, and a member of the Chamber of Commerce, and was an active church member. He belonged to all the florists' associations, national and local, and attended all their meetings. He was widely known in the trade and had a long list of friends in and around Pittsburg. He leaves a wife, two daughters and a son. The interment was at Homewood cemetery.

News Notes.

ANDERSON, IND.—Trade good, prices good and good prospects for a lively spring trade.

PORTLAND, IND.—Trade good but prices are low. However a good trade is anticipated the coming spring.

LITTLE ROCK, ARK.—During the past fall George Vestal built a new house 12x 60 to be used exclusively for propagating evergreens.

COLUMBUS, IND.—Trade very dull, demand for cut flowers much less than last year and prices lower. Prospects good for a lively spring trade in plants.

MUNCIE, IND.—Trade fair, prices rule low, prospects for a lively plant trade are good. The severe winter has seriously interfered with business of all kinds.

CRAWFORDSVILLE, IND.—Trade good, Kraus & Crist intend adding five new houses the coming season for cut flowers, and prospects for future trade bright.

LOGANSPORT, IND.—Trade quiet, prices fair, prospects for spring trade good. Kidd & Son talk seriously of offering their place for sale and retiring from business.

FRANKLIN, PA.—Among the guests at the recent brilliant reception to the Commander-in-chief of the Penna. National Guard was Mr. H. B. Beatty, Oil City, Secretary of the Florists' Protective Association, and his wife.

CONNERSVILLE, IND.—Trade very poor since the holidays. The supply of natural gas having given out the florists had to fall back on coal and wood and as the latter was scarce and high, the profits on the season's business will be considerably cut down.

HAMILTON, O.—Trade has been very good, prices good for good stock and in active demand. Theodore Bock is growing fine roses, White La France being his favorite. He has a fine lot of Asparagus plumosus nanus which he finds very profitable in his cut flower sales.

ST. PAUL, MINN.—At the request of the Women's Auxiliary of the World's Fair Commission the Minnesota State Legislature has adopted the "wild moccasin, or lady slipper" as the official floral emblem of the state. The flower referred to is probably Cypripedium spectabile.

MARION, IND.—Trade picking up. Was very dull after the holidays. Henry Michel has some fine new carnations which he proposes testing further before offering for sale. Mrs. G. R. Fravel is growing some fine roses that would put to blush many growers in the larger cities.

BARABOO, WIS.—The Sauk County Horticultural Society will hold a winter meeting in February, a wild flower show in May, and a chrysanthemum show in November. Officers: President, Frank lin Johnson; vice-president, Wm. Toole secretary, E. K. Tuttle; treasurer, Mrs E. G. Marriott.

RICHMOND, IND.—Trade prospects good for spring. E. G. Hill & Co., have a fine show of Edna Craig carnations and report business brisk, cold weather however, retarding shipments. Beach & Son report cut flower sales good and intend devoting their entire plant to that business in the future.

FORT WAYNE, IND.—Trade very good; demand for cut flowers very brisk and florists report increased sales; prices fair. The new Florists' Club is a success and a more friendly feeling exists among the fraternity than has been exhibited in the past. W. J. Vesey is cutting some good roses and Harrisii.

KOKOMO, IND.—Trade fine. W. W. Coles is dead gone on "Mme. Testout" and is convinced that it is the only rose worth growing. He intends adding two new rose houses 100x25 the coming season. Walter is not slow especially when he sits behind his blooded mare and shows every body the rear end of his sleigh. He is a pusher from pusherville.

SOUTH BEND, IND.—Trade fair only. Trainor & Rettig have removed their store around the corner from their former location and directly opposite the court house square. They still find the sale of blue carnations profitable. The Studebaker greenhouses present a fine appearance, roses and begonias being unusually fine. The Rosalind carnation does exceptionally fine here. Mrs. Oliver has some very fine orchids in bloom which attract considerable attention.

INDIANAPOLIS, IND.—Trade brisk since the holidays and flowers of all kinds in active demand. Good roses very scarce and readily bring good prices. John Bertermann, of Bertermann Bros., is suffering a severe spell of sickness. John Hartje, the popular carnation grower, has a fine lot of new seedlings which he intends offering to the trade next year. The severe winter has been unusually hard on the older florists many having gone through long sieges of sickness. Frank Stack has a fine show of Cattleya Trianæ in bloom. This is his first venture with orchids and he is well pleased with the results; he considers the advertisement of more value than the sale of the flowers.

Recent Legal Decisions.

Rights where Freight has been Injured in course of Transportation.

A common carrier is bound to deliver the property which it undertakes to transport at the point of discharge, safe and uninjured, at the peril of liability, except where the injury has resulted from some cause excepted in a contract, (other than negligence), which is a matter for defense, the burden of proving which is upon the carrier. The consignee or owner has nothing to do but to show the injury, and the carrier becomes at once presumptively liable, and remains so until it shows that said injury resulted from an act of God, the public enemies, or from a cause from which it had exempted itself legally by a special contract. And it would seem to follow that whenever an injury has been done to goods while in the custody of a common carrier, the consignee or true owner has the right of action against

the carrier. But it is the duty of a consignee whose property is injured while in the control of a carrier to pay all the freight charges, and then sue the carrier for the injury done. Though if property is damaged, while in the charge of a common carrier, to a greater extent than the bill for freight, the lien of the carrier is extinguished; and the consignee not only has the right to demand the property of the carrier without payment of the freight charges, but retention by the carrier amounts to a conversion, for which an action will lie.

Miami Powder Co., vs. Port Royal & W. C. Ry. Co. Supreme Court of South Carolina. 16 S. E. Rep. 339.

Rights of seller on purchaser Refusing to accept goods.

In actions for breaches of contract the circumstances of each case must determine what measure of damages should apply, having in view always the giving actual compensation for actual loss. For a breach by the purchaser of a valid contract of sale of goods and chattels by the purchaser, in failing to accept the property and pay the contract price, the vendor may treat the contract as a complete sale, and, at his option, either retain or store the property of the purchaser, or within a reasonable time resell the property in open market. He may also treat the contract as unperformed, and the sale as not having vested title in the purchaser, and retain the property as his own. If the vendor chooses to treat the sale as complete, and hold the property for the purchaser, he may recover the full contract price. If he chooses to treat the sale as complete, and resells the property in open market within a reasonable time, the law deems him the agent of the purchaser for that purpose, and he may apply the proceeds as a payment so far as they will apply, and recover the difference between the contract price and the amount realized at the sale, provided it be less than the contract price. If, however, the vendor chooses to treat the sale as wholly unperformed, and retains the goods as his own, he may sue and recover any loss of profit he would have made had the contract been fully executed, and the contract price paid. This would be the difference between the contract price and the market value at the time and place of delivery.

Slaughter vs. Marlow. Supreme Court of Arizona. 31 Pac. Rep. 547.

Important Distinction in sale and Industrial Contracts.

In contracts of merchants for the sale and delivery or for the manufacture and sale of marketable commodities a statement descriptive of the subject-matter, or some material incident, such as the time of shipment, is a condition precedent, upon the failure or non-performance of which the party aggrieved may repudiate the whole contract. But in contracts for work or skill, and the materials upon which it is to be bestowed, a statement fixing the time of performance of the contract is not ordinarily of its essence, and a failure to perform within the time stipulated, followed by substantial performance after a short delay, will not justify the aggrieved party in repudiating the entire contract, but will simply give him his action for damages for the breach of the stipulation. A contract to manufacture and furnish articles for the especial, exclusive, and peculiar use of another, with special features which he requires, and which render them of value to him, but useless and unsalable to others,—articles whose chief cost and value are derived from the labor and skill bestowed upon them, and not from the materials of which they are made,—is a contract for work and labor and not a contract of sale.

Bock & Pauli Lithographing Co., vs. Colorado Milling & El. Co. U. S. Circuit Court of Appeals. Eighth Circuit. 52 Fed. Rep. 700.

Actions between partners.

It is the law that one partner cannot sue another to recover profits or to recover his share of partnership assets where the partnership is unsettled, although he may sue for an accounting and for the recovery of whatever may be found due on a settlement of the partnership affairs. But this rule does not apply to all cases growing out of partnership contracts. Where there is an agreement adjusting partnership affairs, and that agreement awards to one partner a specific sum, or duty in his favor, he may maintain an action upon a breach of the duty or promise. So where a partner collects money which on settlement of partnership affairs he has agreed shall be collected by his copartner as his individual property, and after collection converts it to his own use, the partner to whom the money belongs may maintain an action for its recovery without a prior demand.

Douthit vs. Douthit. Supreme Court of Indiana. 32 N. E. Rep.

Notice required of dissolution of partnership or retirement of partner.

Strangers are not entitled to any personal notice of the dissolution of a copartnership, or the retirement of a partner from a firm, and therefore an advertisement at the place where the business has been carried on, is sufficient notice for them, but customers and others having dealings with the firm must have actual notice of either. So where one retires from a firm, knowing the previous relations of the firm with persons in another city, and that renewal notes are to be issued to such persons in lieu of others held by them, notice of the retirement, published merely in the newspapers at the firm's place of residence, is not sufficient, unless the notice is in fact seen by such creditors, or knowledge comes to them in some other manner.

Sibley vs. Parsons. Supreme Court of Michigan. 53 N. W. Rep. 786.

Implied authority to fill blanks in Negotiable paper.

The delivery of a note or bill containing blanks impliedly authorizes the holder to fill them as he pleases, unless restrained by the instrument itself, and this authority extends to all parts of the document delivered, for example, the signature of the drawer's name, the payee's name, the date, the time of payment, the rate of interest, the place of payment, and the amount to be paid, so that between the drawer and innocent third parties, the person to whom it was intrusted must be deemed the agent of the person who committed such instrument to his custody, or, in other words, it is the act of the principal, and he is bound by it, and therefore a person executing a blank note will be bound although the holder perverts the power to fill the blank for an unintended use.

First Nat. Bank vs. Johnson. Supreme Court of Alabama. 11 South. Rep. 690.

[Moral:—Be very careful to draw a line through all unfilled spaces where printed blanks of any kind are used. We have received at this office checks for $1 that could have been raised to $1,000 with perfect ease. Do not send out such standing invitations for rascals to make you their victim.—ED.]

THE NEW ROSES.

WHITE LA FRANCE.
KAISERIN AUGUSTE VIKTORIA.
CHRISTINE DE NOUE.

Rooted Rose Cuttings our Specialty.

HEALTHIEST. CHEAPEST. BEST. . . . . .

Send for Catalogue and Prices with Testimonials.

C. STRAUSS & CO., Washington, D. C.

Largest Growers in the World of Roses for Cut Flowers.

Twenty-Five Dollars in Gold.

We will be pleased to pay any one who will send us a more delicious bush bean than the Warren, or a better pea than the Excelsior. You can't afford to raise the American Wonder, when the Excelsior, as good, as early and nearly as dwarf, bears (see Rural New Yorker), larger peas, larger pods, and many more of them. Our Catalogue (sent FREE) on pages 3 and 27 tells all about them.

J. J. H. GREGORY & SON, - - - Marblehead, Mass.

$80.00 THE ROSE $15.00

BRIDESMAID.

THE

PERMANENT-PINK,

NEVER-DEFORMED

MERMET.

OF IT

MR. T. J. SLAUGHTER writes from Madison, N. J.:

JANUARY 3, 1893.

* * * "It gives me pleasure to give the BRIDESMAID my hearty recommendation; from my experience with it this year I am convinced it will supersede the Mermet entirely, owing to its better color and greater market value. I intend to give it in future all the room I can possibly spare. I think growers will go for it strong another season."

Plants from 2½-inch pots, $15.00 per 100

SPECIAL OFFER of Rooted CUTTINGS, only in lots of one thousand each, price $80.00 per lot. Beautifully rooted; carefully packed.

FRANK L. MOORE,

CHATHAM, NEW JERSEY.

Golden Returns.

200,000 ROSES 200,000

We offer well established, healthy plants in below named and many other sorts:

From 2-inch pots, $ 3.00 per 100; $30.00 per 1000
From 3-inch pots, 6.00 " 60.00 "
From 4-inch pots, 12.00 " 120.00 "
Not in excess of any one variety.

50,000 Hybrid Perpetual Roses 50,000

at $4 per 100; $40 per 1000. In 50 select varieties.

New and Rare Varieties at Special Rates given in our Wholesale List, now ready.

WE NAME A FEW SORTS ONLY:

Aurora, Bosanquet, Comt. de Labarthe, Bon Silene, Cels, Devoniensis, C. Mermet, Etoile de Lyon, Hermosa, Mme. Cusin, H. M. Stanley, Malmaison, Marie Guillot, Mme. Lambard, Marie Lambert, Marechal Niel, Kruger, Niphetos, Mme. Jos. Schwartz, Safrano, Perle des Jardins, Sombreuil, The Bride, etc., etc.

For anything in the Florist line, or send your lists to be priced. Address

NANZ & NEUNER,

LOUISVILLE, KY.

ROSES.

TEAS . . . . . $30.00 per 1000
HYBRIDS . . . . . 40.00 per 1000

Healthy plants, in 2-inch pots.

Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.

Trade list on application.

Jacob Schulz,

LOUISVILLE KY.

SPHAGNUM MOSS. CLEAN, DRY, FINE. 1 Bale $1.25; 3 Bales $3.50; 10 Bales $10.00.

JOHN A. SALZER SEED CO., La Crosse, Wis.

Always mention the American Florist when writing to advertisers.

"American Belle."

will not only be the greatest acquisition to the existing list of Roses, but she will also be the

MOST WIDELY ADVERTISED

of any new Rose. Rose buyers will all want the Belle next season. Can you afford to allow your competitor to have all the prestige of having the stock while you have none: Think it over and let us know your decision.

JOHN BURTON, Chestnut Hill, Phila.

PERLE ROSES.

ALSO BRIDES AND MERMETS.

No better stock in New York State. Orders solicited for April or May delivery, in 2½-inch pots; or in 4-inch pots June and July.

NIPHETOS, BON SILENE AND MME. HOSTE IN LIMITED QUANTITIES.

Salter Bros.,

42 W. Main Street, ROCHESTER, N. Y.

ROSES.

FINE PLANTS and ROOTED CUTTINGS

AMERICAN BEAUTY,
LA FRANCE,
CATHERINE MERMET,
BENNETT,
BRIDE,
WOOTTON,
GONTIER.

METEOR,
PERLE DES JARDINS,
WATTEVILLE,
MME. CUSIN,
BRIDESMAID,
NIPHETOS,

Specially fine stock in the TWO MOST FASHIONABLE ROSES grown, METEOR and AMERICAN BEAUTY.

SEND FOR PRICES. CHAS. F. EVANS & BRO., FRANKFORD, PHILADELPHIA, PA.

Mention American Florist.

I WILL OFFER CHEAP

FOR NEXT 30 DAYS,

The following Roses, rooted in December, and as fine and healthy stock as any grower can send out.

SEND FOR PRICES.

Bridesmaids, Brides, Mermets, Perles, Sunsets, Niphetos,
Richardias, Amaryllis of sorts, Daybreak carnations, Geraniums, Smilax and Florists' Seeds.

Address E. HIPPARD, Youngstown, O.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST. . . . . .

ANCHORAGE ROSE CO., Anchorage, Ky.

Roses of Rare Excellence; strong 1 and 2-yr., outdoor grown, budded and own roots. Leading Nurserymen call them "best ever seen." Shall we express sample?

	100	1000
Climbing, 2-yr., 3 to 5 ft., own roots	$8	$70
" 1-yr., 2 to 3 ft., own roots.	7	60
Hyb. P., 2-yr., 2 to 4 ft., budded or own roots	9	85
" 1-yr., 1½ to 2 ft., " " "	8	75
Mad. Plantier, 2-yr., 2 to 4 ft., own roots . .	8	70
" " 1-yr., 1½ to 2 ft., own roots .	7	60
Moss, 2-yr., 2 to 4 ft., budded or own roots. .	9	85
" 1-yr., 1½ to 2 ft., budded or own roots	8	75

Evergreens, 2, 3 and 4 feet, fine. Full Stock Fruit Trees, Ornamentals—Everything! Stark Bros., Louisiana, Missouri.

FORCING ROSES

All the old, and such new varieties as have been proved, kept in stock.

M. A. HUNT,

TERRE HAUTE, IND.

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

WE HAVE received the first issue of the *National Nurseryman*, which is to be published monthly at Rochester, N. Y. C. L. Yates is proprietor and Ralph Olcott, editor. The number before us is a very attractive one, and it would seem that there was a place for such a journal, devoted to the interests of the nursery trade. Some live trade questions are brought before the nurserymen in the first number, the discussion of which cannot but result in good.

A NEW MUSHROOM.—Mr. F. Boulon, Sea Cliff, L. I., sends us specimens of the new mushroom he has been growing. They were of good size and excellent flavor. Expert growers have pronounced this mushroom a decided acquisition on account of its large size, abundance as a cropper and adaptability for cultivation in summer.

THE Pittsburg and Allegheny Florists' and Gardeners' Club has issued invitations to a banquet to the members of the American Carnation Society, to be held at the Hotel Schlosser, Pittsburg, the evening of February 22.

THAT excellent gardening journal *Gardening*, semi-monthly, price $1 a year, and the AMERICAN FLORIST, together to one address for $1.75. Address orders to the American Florist Co.

A BUNCH of violets of very large size and fine quality has been received from Mr. F. Boulon, Sea Cliff, L. I. Such flowers are always sure of a market.

DO YOU WANT a list of the leading park superintendents of America? You will find such a list in our new trade directory and reference book.

PLEASE WRITE on your printed letter head when addressing our advertisers. If you have no printed letter head, then enclose your business card or bill head.

HARDY CUT FERNS?

Oh Yes, over

5,000,000.

I can supply you the year round with A1 goods. Also new Bouquet Green, Laurel festooning, etc.

H. E. HARTFORD,

18 Chapman Place, BOSTON, MASS

Mention the American Florist when writing to advertisers on this page.

Asparagus Plumosus Nanus.

CUT STRINGS: 6 to 8 feet long, 50 cents each. 10 to 15 feet long, $1.00 each.

In large or small quantities all the year round. The largest stock in the country.

W. H. ELLIOTT, Brighton, Mass.

THE

CHICAGO CUT FLOWER EXCHANGE

We still have some choice Advertising Space left in the Exchange.

The Headquarters of the Chicago Florist Club is now in the Exchange, which will still further enhance its value as an advertising medium.

SPACE TO RENT ON BLACKBOARD, BY THE WEEK OR MONTH.

Exhibitors making Chicago their Headquarters during the World's Fair, can obtain Desk Room at the Exchange at a reasonable rate.

FOR TERMS ADDRESS

The Chicago Cut Flower Exchange,

45 Lake Street, Chicago.

Cape Flowers, new crop in best white quality ready for delivery, $1.25 the pound.

Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, always on hand, from 30-in. upwards, at 45c., 50c., 60c., 75c. and $1.00 each, according to length.

Supplies of all kinds, such as funeral sheaves Immortelles, Letters, Doves, Wire Designs, Satin bows and ribbon, foil and violet foil, Ornamental Grasses constantly on hand.

Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, in rich assortment.

Baskets of all styles, Plain and Fancy; also the latest designs in silver-plated Baskets and Jardinieres as **Easter Novelties.**

CATALOGUE to the Trade only, mailed free.

August Rölker & Sons

136 W. 24TH STREET,

NEW YORK, P. O. Station E.

H. BAYERSDORFER & CO.,

WHOLESALE

FLORISTS' SUPPLIES ONLY,

56 N. 4th Street,

PHILADELPHIA, PA.

Our new Catalogue is now out, free upon application.

MARSCHUETZ & CO.,

FLORISTS' • SUPPLIES,

23 & 25 N. 4th St., PHILADELPHIA, PA.

Send for Catalogue.

IF YOU NEED ANY

Cape Flowers, Immortelles, Grasses, plain or fancy **Baskets, Metal Wreaths, Letters, Doves,** or any other thing in the Florists' supply line, mail us your order.

REMEMBER WE ARE THE

Leading Manufacturers of Wheat Sheaves and Baskets, and Importers of **Florists' Supplies.**

Catalogue on application . . .

ERNEST KAUFMANN & CO.,

113 N. 4th Street, PHILADELPHIA, PA.

C. A. KUEHN,

(Successor to ELLISON & KUEHN),

WHOLESALE

FLORIST,

1122 PINE STREET,

St. Louis, Mo.

A complete line of Wire Designs.

WM. ELLISON,

(Late of ELLISON & KUEHN),

WHOLESALE FLORIST,

AND FLORISTS' SUPPLIES,

1402 PINE ST., ST. LOUIS, MO.

H. L. SUNDERBRUCH,

WHOLESALE FLORIST

4TH & WALNUT STREETS,

Cincinnati, O.

DAN'L B. LONG,

COMMISSION • FLORIST,

495 Washington St., BUFFALO, N. Y.

FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.

Lists, Terms, &c. on application.

GEO. MULLEN,

WHOLESALE FLORIST.

Florists' Supplies Always in Stock.

17 CHAPMAN PLACE,

(Off School St., near Parker House),

BOSTON, MASS.

Orders by Mail, Telegraph, Telephone or Express promptly filled.

FINE CUT STRINGS

—OF—

Asparagus Plumosus.

JOHN BURTON,

Chestnut Hill, PHILADELPHIA, PA.

We are the People!

Who? KOFFMAN,

Where? WALDEN, Orange Co., N. Y.

What? SMILAX

25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.

When? ALL THE YEAR AROUND.

Also Adiantum Cuneatum Fronds

At $1.25 per 100.

And he pays the Express.

Mention American Florist.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO,
(Successor to Vaughan's Cut Flower Dep't.)
All Flowers in Season.
Full line of FLORISTS' SUPPLIES.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
116 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.: Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange.
45 Lake St., CHICAGO.

M. OLSON,
Wholesale **FLORIST,**
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY & CO.
Wholesale and Commission
FLORISTS,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

WHOLESALE FLORISTS
La Roche & Stahl
N. E. CORNER
13th & Chestnut Sts.,
PHILADELPHIA.
Mention American Florist.

SAMUEL S. PENNOCK,
Wholesale Florist
REMOVED TO REAR OF 42 S. 16th ST.,
Philadelphia, Pa.

SMITH, The Florist,
GROWER OF
Fine Roses & other Cut Flowers
WHOLESALE AND RETAIL,
77 S. 7th Street, MINNEAPOLIS, MINN.

Wholesale Markets.

Cut Flowers.

NEW YORK, Feb. 14.

Roses, Bon Silene, Gontiers	2.00@ 3.00
" Perles, Niphetos	2.00@ 4.00
" Mermet, Bride, Hoste	4.00@ 8.00
" Cusin, Watteville	4.00@ 8.00
" Bridesmaid	6.00@12.00
" La France, Albany	5.00@12.00
" Meteor	15.00
" Beauty	15.00@100.00
" Hybrids	25.00@50.00
Carnations	.50@ 1.50
Mignonette	2.00@ 8.00
Romans, narcissus	2.00@ 3.00
Tulips, Valley	1.00@ 4.00
Harrisii	3.00@ 8.00
Violets	1.00@ 1.50
Adiantums	1.00
Smilax	15.00@20.00
Lilac (bunch)	1.00@ 1.50

BOSTON, Feb. 14.

Roses, Niphetos, Gontier	5.00@ 8.00
" Perle, Sunset, Wootton	6.00@10.00
" Bride, Mermet	8.00@16.00
" Meteor	15.00@20.00
" Beauty, Hybrids	25.00@75.00
Carnations	1.50@ 2.00
Valley	1.00@ 3.00
Hyacinths	1.00@ 2.00
Daffodils, tulips	2.00@ 4.00
Violets	.50@ 1.00
Mignonette	1.00@ 6.00
Callas, Harrisii	10.00@12.00
Pansies	.75@ 1.00
Freesia	1.50@ 2.00
Smilax	17.00
Adiantum	1.00@ 2.00
Asparagus	50.00

PHILADELPHIA, Feb. 14.

Roses, Perle, Gontier, Niphetos, Sunset	4.00
" Mermet, Bride, Albany	8.00
" La France	8.00@10.00
" Hoste, Cusin, Watteville	4.00@ 6.00
" Bennett, Wootton, Guillot	6.00@ 8.00
" Meteor	10.00@12.00
" Beauties	25.00@50.00
" American Belle	40.00@50.00
" Brunners	75.00
" Laing, Magna Charta	30.00@50.00
Carnations	1.50@ 2.00
Mignonette	2.00@ 3.00
Violets	1.00@ 1.50
Valley	2.00@ 3.00
Daffodils	4.00
Tulips	4.00@ 5.00
Freesia	1.00@ 2.00
Callas, Harrisii	8.00@12.00
Adiantum	1.00@ 1.50
Asparagus	50.00@75.00
Smilax	15.00@20.00

CHICAGO, Feb. 14.

Roses, Perles, Niphetos, Gontier	4.00@ 5.00
" Mermet, La France Bride	6.00@ 8.00
" Albany, Wootton, Bennett	6.00@ 8.00
" Beauty	20.00@25.00
Carnations, short	1.00@ 1.50
" white, long	1.50@ 2.50
" colored	2.00@ 3.00
" fancy	3.00@ 4.00
Romans Valley	3.00@ 4.00
Tulips	3.00@ 6.00
Narcissus	3.00@ 4.00
Freesia	3.00@ 5.00
Daffodils	6.00
Dutch hyacinths	6.00@10.00
Violets	1.00@ 2.00
Callas, Harrisii	12.00@18.00
Marguerites	.75@ 1.00
Heliotrope	1.00
Alyssum	.40
Smilax	15.00@18.00
Adiantum	1.00@ 1.25

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

N. F. McCARTHY & CO.
Wholesale Florists
AND JOBBERS IN FLORISTS' SUPPLIES
1 Music Hall Place, BOSTON, MASS.
Also entrance from Hamilton Place through Music Hall.
We keep a large supply of Fancies and Carnations always on hand. Return telegrams sent immediately when unable to fill orders.
AUCTION SALES OF PLANTS SPRING AND FALL

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., **BOSTON, MASS.**
Mention American Florist.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
The finest Roses, Violets and Carnations
Branch, at Cut Flower Exchange, 40B E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

HENRY W. BAYLIS,
Wholesale Florist
940 BROADWAY,
. . . . NEW YORK.

CUT SMILAX.
From Nov. 1st to May 1st our price for Smilax will be 20 cents per string. Quality first-class. Prompt attention to orders by wire.
J. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

The Seed Trade

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1883. Applications for membership should be addressed to Wm. Meggatt, chairman membership committee, Wethersfield Conn.

Philadelphia Seedsmen.

From Art in Advertising.

Mr. W. Atlee Burpee is another distinguished Philadelphian. To the outside public Mr. Maule and Mr. Burpee spend their days and nights planning schemes to ruin each other. But men are deceivers ever, and once a week Mr. Maule and Mr. Burpee have a love feast together: Mr. Maule says what a clever man Mr. Burpee is and Mr. Burpee says there never was such a smart fellow as Maule—never! And so the merry war goes on.

Mr. Burpee is still a young man. His natural love for flowers brought him into the business before he was seventeen. He is tall, well built, wears a full beard, and knows a hawk from a handsaw when it comes to seeds. Unlike Mr. Maule, he approaches his trade in a conservative spirit.

Mr. William Henry Maule is a typical well-dressed, prosperous-looking citizen who employs a fashionable tailor, wears fasionable clothes, red kid gloves, patent leather boots and the silver-grey broad-brimmed slouch hat so much affected by the present-day Philadelphian. I am thus particular in my description so that the 197,350 "friends" which Mr. Maule has will be able to recognize him on the street. I met one of his friends—Obadiah Jaybird—whose idea, I am sorry to say, did not tally with the facts in the case. He thought Mr. Maule went around in his shirt sleeves, wore cowhide boots, with the trousers tucked in at the top, chewed a wisp of straw, and always carried a hoe in his hand, by gosh! I am sorry to dispel so poetic an illusion, but the interests of truth and history demand this correction.

THE IMPORTATION of bulbs and plants from Jan. 1st, 1892, to Dec. 31st, 1892, in New York port, was as follows: Bulbs, $370, 674; plants, (free of duty) for forcing, $229,122; Plants and Nursery Stock (20 per cent. duty) $109,567.

ONIONS FOR PROFIT is the title of a neat little 100-page book published by W. Atlee Burpee & Co. It is written by T. Greiner, and contains ample information covering every point in onion culture from sowing to harvesting.

INDIANAPOLIS, IND.—F. C. Huntington & Co. have moved into the remodeled building, 66 E. Washington street, and now occupy three floors 195x22 feet.

Catalogues Received.

L. Green & Son Co., Perry, O., nursery stock; E. & J. C. Williams, Montclair, N. J., nursery stock; Anna B. Nickels, Laredo, Texas, cacti, etc.; Memphis Floral Co., Memphis, Tenn., plants and cut flowers; Hans Nielson, St. Joseph, Mo., plants and cut flowers; C. B. Whitnall & Co., Milwaukee, Wis., seeds and plants; The Farmers' Nursery Co., Tadmor, O., nursery stock; John A. Bruce & Co., Hamilton, Ont., seeds; Klehm's Nursery, Arlington Heights, Ill., plants and nursery stock; Theo. Koss, Milwaukee, Wis., seeds; John D. Imlay, Zanesville, O., seeds and plants.

Some Rose Queries.

I would like to ask a few questions. Is smoke an injury to the rose? If so, please state what effect it has, and what part of the plant it affects?

When is the proper time to mulch roses? What is the best article to use in mulching? Would you use bone dust? How often would you mulch them? Would it pay to mulch roses at this time of the year? That is, roses that were planted about Oct. 15. They have not grown very much, and will be thrown out about the middle of May.

BUFFALO.

Patents Recently Granted.

Fruit-stoning machine, J. S. Briggs, San Buena Ventura, Cal.; tree protector, M. B. Ryan, St. Louis, Mo., and P. Ward, Madison, Ill.

ALLEGHENY, PA.—Lawrence Richter, one of the oldest residents of this city, died February 2, aged 79 years. Among his surviving children are Joseph Richter, of Ludwig & Richter, and Lawrence Richter, with the firm of J. R. & A. Murdoch.

DO YOU WANT an alphabetical list of the chrysanthemums in commerce in America, with class and a brief accurate description of each one, and synonyms noted? You will find such a list in our new trade directory and reference book.

DO YOU WANT a list of the leading cemetery superintendents? You will find such a list in our new trade directory and reference book.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—By a florist, landscape and fruit gardener, 20 years' experience; German, single, 39 years of age. Address H. HELLER, care A. Schenkel, Denver, Colo.

SITUATION WANTED—By competent gardener and florist, German, 35 years of age; best of references for private or commercial place. Address F O, care American Florist, Chicago.

SITUATION WANTED—Gardener and nurseryman; a young man who has had practical experience in the business. Good testimonials. Address FREDERICK EDMUNDS, care American Florist.

SITUATION WANTED—As foreman in private or commercial place; thoroughly experienced in every branch, especially rose growing and nurseries; 35 years old, married. Best references. Address ROSENGREN, Glenbrook, Conn.

SITUATION WANTED As foreman or manager on public grounds or large commercial place; have had life experience in the leading establishments in Europe and this country. Address LENGENFELDER, 751 Hinman St., Chicago.

SITUATION WANTED As gardener and florist thoroughly competent in all its branches. American and European experience. English, single. Best of references. Address R. HUGHES, care F. N. Lawrence, Bayside, Long Island, N. Y.

SITUATION WANTED As grower of roses, carnations, etc. 12 years' experience. Married. Late foreman of J. H. Dunlop, Toronto, Ont. Good wages expected. Best of references. A. DIETRICH, 52nd St. South of Woodland Ave., West Phila., Pa.

SITUATION WANTED—By a young man possessing good qualities (4 years' experience) employment on commercial place; must positively be good place and permanent for steady and industrious young man. Pennsylvania preferred. Address HUSTLER, care American Florist.

SITUATION WANTED—A good place for a good man. A thorough, practical rose grower, etc., being with us two years, we are desirous of seeing him in a situation that his ability deserves. Wholesale establishment and west preferred. Address ANCHORAGE ROSE CO., Anchorage, Ky.

SITUATION WANTED By an energetic first-class man, as head or second gardener; has had many years practical experience among orchids, stove plants, grapes, etc., with a thorough knowledge of outdoor work, both here and in England; references as to ability, habits, etc., from last employer. Address stating terms to ORCHID, care R. M. Grey, 137 Berkley Ave., Orange, N. J.

SITUATION WANTED—A good rose grower, also good bedding plant designer, first class worker, sober and honest, desires position as florist and gardener; recommendations from first-class commercial florist places. Western parts country preferred. Only first-class parties need apply. Address, stating wages, W. W., care Mr. Gorke, Desplaines Ave., Harlem Post Office, Oak Park, Ill.

WANTED—Practical florist; single man. Address, stating wages etc., Box 161, Boise City, Idaho.

WANTED—An improver who wishes to obtain good knowledge of the trade and is willing to work. ANCHORAGE ROSE CO., Anchorage, Ky.

WANTED—A competent young man for retail flower store. Send references and wages expected. H. F. HALLE, 348 W. Madison St., Chicago.

WANTED—200 to 500 Beauty Poitevine geraniums. Would take them in small lots if they cannot all be had together. State price. Address JOS. T. PHILLIPS, West Grove, Chester Co., Pa.

WANTED A florist of experience and ability to establish himself in one of the most attractive suburbs of Chicago on the north shore. To the right man with some capital proper encouragement will be given in the way of assured business and financial aid Address K., care American Florist.

FOR SALE—I will sell my rooted cutting business, greenhouses, etc., at a bargain; well established well advertised and growing. S. B. FIELD, Roselle, N. J.

FOR SALE—Flat top boiler, 17 3/4-inch flues, 8 feet long, in use two seasons, in good condition; will heat 2,000 feet 4-inch pipe. LEWIS TURNER, Kenosha, Wis.

FOR SALE—At a bargain and on easy terms, a good business in a flourishing city near St. Paul. Proof profits over $1,200 per annum. Address SELLER, care American Florist.

FOR SALE OR TO LEASE—Eight greenhouses containing about 30,000 feet of glass within 12 miles of New York City. Enquire of A. HIBBINS, 150 Dodd St., E. Orange, New Jersey.

FOR SALE—Unequaled opportunity for a live florist to purchase a small, well-paying established business. For all particulars address Box 432, Haverstraw-on-Hudson, N. Y.

FOR SALE—Florist and nursery business, 3 houses, 2,500 feet of glass, all new; within 100 miles of Chicago. Good shipping point; good reason for selling. Address A B, care American Florist.

FOR SALE—Paying florist's business, large selected stock, good patronage, home and abroad, 3/4-acre lot, good dwelling, splendidly located; best reasons for selling. Address PROF. BAGLEY, Abilene, Kans.

FOR SALE—Florists' business at a bargain; two houses, over 2,000 feet of glass; best location in town. For particulars address MRS. R. M. TRUCKEMILLER, 118 Luz. Ave., West Pittston, Pa.

FOR SALE—Ten acres in city limits with house and two barns, fine water reservoir, hotbeds, small fruit, carnations, roses, lettuce, 10,000 pansies, etc. A rare bargain for florist or gardener. Growing city of 15,000. Address TITUS & JACKSON, Muscatine, Iowa.

WANTED, A FOREMAN.

Capable of taking charge of a large establishment where cut flowers are grown. Must have had great experience and be able to furnish best of references. Send full information, giving age, whether married, copies of references, etc A good position and a good salary to the right man. Position ready any time before June 1. Address

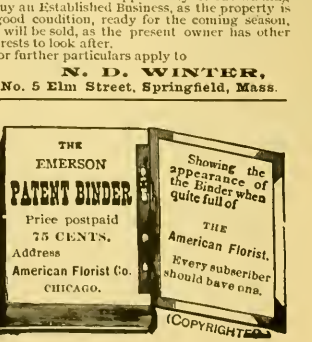
Grower, care American Florist.

FOR SALE.

Ten greenhouses, about 15,000 square feet of glass, with two acres of land, and stock for sale very cheap. The houses are in good condition, situated in one of New England's best localities, with a large and extra good home market, heated by a first-class steam plant, cost $1200, pots and implements. This is a fine opportunity for one wishing to buy an Established Business, as the property is in good condition, ready for the coming season, and will be sold, as the present owner has other interests to look after.

For further particulars apply to

N. D. WINTER,
No. 5 Elm Street, Springfield, Mass.



Pumpkin, 'millions, 'taters round,
Warbling in a row,
Sing it out in ringing tones—
Burpee's seeds will grow.

Burpee's Farm Annual for 1893

Is Better than Ever Before.

A handsome book of 172 pages. It tells all about the best seeds that grow, including rare novelties of real merit, honest descriptions, hundreds of illustrations, with beautiful colored plates painted from nature. Important new features for 1893—original and interesting. Mailed *Free to intending purchasers;* to others for ten cents, which is less than cost. *Write to-day.*

Burpee's Blue List, giving wholesale prices for Market Gardeners and Florists, will be mailed on application.

W. ATLEE BURPEE & CO.,
Philadelphia, Pa.

HULSEBOSCH BROS.,

BULB AND PLANT GROWERS,

OVERVEEN near Haarlem HOLLAND.

Prices on application for the coming season of

ROMAN HYACINTHS,	PAPER WHITE NARCISSUS,
LILY of the VALLEY,	HARRISII LILIES,
LIL. LONGIFLORUM,	TULIPS,
DUTCH HYACINTHS,	CROCUS,
SPIRAEAS,	ROSES, ETC., ETC.

☞ Spring Catalogue now ready. ADDRESS

A. HULSEBOSCH,
P. O. Box 3118. Warehouse 58 West Street,
NEW YORK CITY.

BENJAMIN RIMBAUD, BULB GROWER,

Quartier du Temple, Toulon, var, France.

Cable address **Benrimbaud, Toulon.**

The largest cultures in the South of France, of **WHITE ROMAN HYACINTHS,** Narcissus Paper White grandiflora, N. Double Roman, N. **Double Von Sion,** true pure yellow, and other Daffodils. **Lilium Candidum,** the largest bulbs. Freesias. Jonquilla Campernelli, largest flowering, for early forcing. Allium, Anemone, Cardinal's Hat, A. Double Rosette the earliest, etc. Prices on application.

Send for Catalogue of
JAPAN BULBS, SEEDS, AND SHRUBS.
ARAUCARIAS,
AUSTRALIAN Palm Seeds,
CALIFORNIA BULBS AND SEEDS to
H. H. BERGER & CO.
ESTABLISHED 1878. SAN FRANCISCO, CAL.

G. J. MOFFATT,

Manufacturer of

PAPER BAGS AND ENVELOPES

Special attention given to
Seed Bags and Catalogue Envelopes.
NEW HAVEN, CONN.

GENUINE CHINESE SACRED LILIES

In original imported baskets of 30 large fine bulbs, per basket, $1.25.

It will pay you big to grow them. Innumerable flowers can be cut from them. Make money, buy some, order now.

H. G. FAUST & CO.,
64 & 66 N. Front St., PHILADELPHIA, PA.
Woodlawn Seed Farm, Philadelphia, Pa., 1,300 acres.

Always mention the AMERCAN FLORIST when writing to advertisers

---

WE SELL SEEDS

TO FLORISTS AND DEALERS.

WEEBER & DON,
SEED MERCHANTS AND GROWERS,
114 Chambers St., New York.
Catalogues on Application.

100,000 Selected 3 yr. old Berlin Lily of the Valley Pips

offered at our New York Warehouse for $18 per Case of 2500. Wire orders at our expense.

CHOICE SWEET PEAS. Of these we are the largest growers in the world. Large consumers should write for prices and contract for delivery next Fall.

ONION SEED. A few hundred pounds Prizetaker and Yellow Danvers can still be had at reasonable prices.

Offices & Salesrooms, 427-429 Sansome St. 501-503 Clay St., San Francisco, Cal. } **SHERWOOD HALL NURSERY CO.** { Greenhouses, Nurseries, Seed Farm and Trial Grounds, Menlo Park, Cal.

Extra Choice Onion Seed.

For years we have been raising onion seed from extra choice onions. Testing our seed side by side with numerous other lots it has proved to be the best strain catalogued. On four of our farms we raise Round Yellow Danvers (a rounder and thicker onion than formerly), Early Red Globe (the best red for general crop), Early Southport Red (a new variety), Early Yellow Cracker and Early Flat Red. These two last are capital sorts where the seasons are short. To those purchasing a pound or more of seed we will send free a copy of our book on onion raising. A very liberal discount made on large lots. Is the best seed any too good? It means fifty dollars more per acre for the crop. **J. J. H. GREGORY & SON, Marblehead, Mass.**

Mention American Florist.

Fancy. Dagger.

2,000,000
HARDY EVERGREEN CUT FERNS,

Especially for Florists' Use.

SPECIAL ATTENTION PAID TO SUPPLYING THE WHOLESALE TRADE

FIRST QUALITY HARDY CUT FERNS, $1.25 per 1000. In lots of 5000 and upwards, $1.00 per 1000.

L. B. BRAGUE, Hinsdale, Mass.

Purchase on the Co-operative Plan.

The advantages offered by the

WISCONSIN FLOWER EXCHANGE

are accessable to all Florists of good standing. We are now making up orders for

Lilium Harrisii and Freesias.

Parties requiring good bulbs at cost, or desiring further information on this subject correspond with us at once. Shipmade from the East or West to all parts of the U. S.

The Wisconsin Flower Exchange,
131 Mason Street, MILWAUKEE, WIS.

German Lily

OF THE VALLEY PIPS.

A grand quality for forcing.

10,000 at	$7.00 per 1000
50,000 at	6.50 per 1000
100,000 at	6.00 per 1000

Free packing and cases, f. o. b. New York, Boston or Philadelphia. Net cash with order.

OSCAR TIEFENTHAL, Wandsbek, Hamburg, Germany.

Mention the American Florist when writing to advertisers on this page.

SEEDS

OUR SPECIALTY

Fresh Flower and Vegetable Seeds of most improved strains and highest quality for FLORISTS AND GARDENERS.

Catalogues and price lists free on application.

W. W. BARNARD & CO.,
6 and 8 North Clark Street, CHICAGO.
Mention American Florist.

WHITE DOVES

FOR FLORISTS.

Largest and finest stock in the United States. Write for prices to

S. J. RUSSELL,
103 Van Winkle St., Jersey City, N. J.

AGENTS:
J. C. Vaughan, Chicago, Ill.
H. Bayersdorfer & Co., Phila., Pa.

LILIUM HARRISII.

Original and largest growers of this important bulb.

OUR SPECIALTY!
True Stock. Lowest Prices. Best Quality.

F. R. PIERSON CO.,
TARRYTOWN-ON-HUDSON, NEW YORK.

Cincinnati.

At the meeting of the Cincinnati Florists' Society held the evening of the 11th inst., officers for the ensuing year were elected as follows: President, B. P. Critchell; 1st Vice-President, Albert McCullough; 2nd Vice-President, W. C. Nolan; Treasurer, George Corbett; Secretary, E. G. Gillett; Executive Committee —R. J. Murphy, John Freis and W. C. Nolan. This meeting was one of the best and largest the society has had for a long time, and am pleased to say our membership is gradually increasing. By May the society expects to be in their permanent quarters in our new Floral Market, which is now an assured fact. This building will be the finest of its kind in the United States, and we can feel justly proud of capturing this prize. Our society has made quite a good deal of progress during the past year. We have had a grand and successful floral exhibition, which are always educators of and a decided benefit to the florists as well as the community at large. The interest in our meetings for the coming year we trust will continue as started and we trust that each and every member will consider himself a committee of one to help push our society to prominence and that it is the duty of each and every member to be present at our meetings. Through your columns our society desires to thank our retiring president, Mr. Corbett, for his faithful attendance at all meetings during his administration of two years, which has been conducted without one single flaw. To our incoming president we wish the same success.

I am sorry to report the loss by fire on the night of February 3, the stable and contents, including three horses, and also part of the greenhouses, of B. P. Critchell. The origin of the fire is unknown, but supposed to be the work of some "fire bug." The loss sustained will probably reach from $4,000 to $5,000.

Trade is good but flowers are scarce, especially roses.

Mr. R. Witterstaetter had on exhibition several choice specimens of seedling carnations. One which deserves especial mention is a pink, a beautiful flower and a long and very stiff stem. The flower compares favorably with Edna Craig and Daybreak and will be heard from again a little later. Mr. Witterstaetter is one of our foremost growers of this beautiful flower.

Some of our members will probably attend the meeting of the American Carnation Society in Pittsburg on the 21st.

E. G. GILLETT, Sec'y.

New Chrysanthemums.

IRMA—Silver Medal and $50 premium at Cincinnati; also National Certificate; it is among the Pink Chrysanthemums what Mrs. L. C. Madeira is among the Yellow.

ERNST RIEMAN—Mahogany Red. Certificate.

BYRUM SCHILTGES—Dark Red. Certificate.

Above three varieties Strong Plants by mail $2.50. Send for Chrysanthemum List.

H. W. RIEMAN,

Cor. East and Morris Sts. INDIANAPOLIS, IND.

Mention American Florist.

VIOLETS.

MARIE LOUISE RUNNERS

Healthy Stock. Good Plants.

ANDREW WASHBURN,

P. O. Box 1125. BLOOMINGTON, ILL.

ROOTED CUTTINGS.

CARNATIONS. **Send for list.**

GOOD STOCK. GOOD CUTTINGS. GOOD VARIETIES.

Big lot of LIZZIE McGOWAN now ready, at a bargain.

FRENCH CANNA. A splendid assortment at $4.50 per 100; $36.00 per 1000; good strong roots. Cash with order. Correspondence Solicited. Inspection Invited.

L. B. 496. **ALBERT M. HERR, LANCASTER, PA.**

CARNATIONS!

Study my WHOLESALE LIST of Rooted Cuttings . . . before ordering. . . .

F. M. PENNOCK,

Bloomfield. Charles Town, Jefferson Co., W. Va.

STRONG CARNATION PLANTS

DAYBREAK, ALEGATIERE, GRACE WILDER, LIZZIE McGOWAN, PORTIA, PRES. GARFIELD, and SILVER SPRAY.

From 2-inch pots, $3.50 per 100; $30.00 per 1000. Save express by buying near home

ROOTED CUTTINGS OF THESE VARIETIES ON FOUR WEEKS NOTICE, at $15 00 per 1000.

NAGEL GREENHOUSES, MINNEAPOLIS, MINN.

ROSES AND CARNATIONS.

The Largest and Finest Stock in the Northwest ever offered at the following prices:

ROSES—Perles, Hoste, Sunset, La France, Mermet, Bride, C. Soupert, Niphetos, from 2½-inch pots, $4.00 per 100
Mme. Watteville, Albany, Pierre Guillot, Meteor, from 2½-inch pots ..... 5.00 per 100
American Beauty, from 2½-inch pots ..... 7.00 per 100

CARNATIONS—Silver Spray, Lizzie McGowan, Hinze's White, Hector, Portia, Garfield, Grace Wilder, Fred. Creighton, Mrs. E. G. Hill, from 2-inch pots ..... 3.00 per 100
Rooted Cuttings of all varieties offered ..... 2.00 per 100

Cut Flowers, Roses, Carnations Lilium Harrisii and Smilax at lowest market prices. Telegraph orders promptly attended to. **CHRIST HANSEN, Wholesale Florist, ST. PAUL, MINN.**

"CHRYS-COLA"

COLEUS, best Varieties, best Stock, now ready.

SEND FOR PRICE LIST

FUCHSIAS, GERANIUMS AND CHRYSANTHEMUMS

are ordered to Feb. 15th, with the exception of a few varieties.

I am now booking orders for delivery after above date.

S. B. FIELD, Roselle, N. J.

Azalea Indica

In bud or bloom, from 75c. to $1.50 each.

CHINESE PRIMROSES,

4 and 5-inch pots, $8.00 to $15.00 per 100.

WM. A BOCK, North Cambridge, Mass.

CHRYSANTHEMUMS.

ROOTED CUTTINGS.

Lincoln, Ada Spaulding, Domination, L. Boehmer, Rohallion and 20 other good market sorts, $1.50 per 100; Jessica and Ivory, $2.50 per 100. Ready for delivery January 15th.

Address **J. G. BURROW, FISHKILL, N. Y.**

10,000 Nymphæa Odorata or White Water Lily Roots **FOR SALE.**

Price, $5.00 per 100; $40.00 per 1000; or will exchange for seeds, plants or bulbs. For further particulars ADDRESS B. L. CLARK, Randolph, Mass.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

CARNATIONS

ROOTED CUTTINGS.

Puritan, Aurora, Golden Triumph, Grace Darling, Daybreak, Pearl, White Wings, Lizzie McGowan, Louise Porsch, W. P. Dreer, J. R. Freeman, and many other varieties; fine, healthy stock, ready January and after.

HYBRID PERPETUAL ROSES

500 Paul Neyron, strong plants....$10.00 per 100.
20 other leading varieties ... $10.00 per 100
$90.00 per 1000.

☞ Send for price list.

WOOD BROTHERS, Fishkill, N. Y.

GRACE BATTLES

and over 60 other varieties of

CARNATIONS

offered the Wholesale Trade.

My list embraces the best Standard and New kinds, including some of particular interest to growers of seedlings. Correspondence and personal inspection solicited. C. J. PENNOCK,

The Pines. Kennett Square, Chester Co., Pa.

ROOTED CUTTINGS of CARNATIONS

By the Wholesale.

Ready now. This is the best time for intending buyers to supply themselves. I offer them at moderate prices. Send for Price List. Address

JOSEPH RENARD, Unionville, Chester Co., Pa.

ROOTED CUTTINGS of Roses and Carnations free by mail.

Brides and Mermets.....$1.35 per 100.
La France and Gontiers ..... 1.50 "
Am. Plug, Anna Webb, Hector, etc. 1.50 "
Lamborn, Wilder, Spray, Hinze 1.35 " Cash with order. J. J. Lampert, N. King St., Xenia, O.

When writing to any of the advertisers on this page please mention the American Florist.

NOW IS THE TIME TO BUY

Carnations!

You want the BEST. We will give you the BEST ROOTED CUTTINGS to be had, if we get your order.

A postal card, with your address, costs one cent, will bring our TRADE LIST, the neatest of the year. It tells you all about the newest and best varieties. It tells the truth, and it's the truth that tells.

We also have COLEUS when you need them. You will certainly want our new yellow coleus.

ALEX. McBRIDE,

. . . . **ALPLAUS, N. Y.**

W. R. SHELMIRE,

Carnation Grower

AVONDALE, CHESTER CO., PA.

Send for price list of **Rooted Cuttings.**

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

CARNATIONS

ROOTED CUTTINGS.

Send for Price List of all the leading varieties.

WM. SWAYNE,

P. O Box 226. KENNETT SQUARE. Chester Co., Pa.

ROOTED CUTTINGS

Of the Best Old and Most Promising new varieties of

CARNATIONS.

Write for a catalogue and send list of wants for an estimate.

J. J. Styer,

CONCORDVILLE, PA.

ROOTED CARNATION CUTTINGS.

NOW READY.

Of the best old and new varieties now in cultivation, in small or large quantities. Send for estimate of wants or price list.

ISAAC LARKIN, Toughkenamon, Pa.

SEND FOR A COPY

—OF OUR—

TRADE DIRECTORY

AMERICAN FLORIST CO., CHICAGO.

THE NEW WHITE CARNATION

GOV. RUSSELL

A SEEDLING OF 1888.

Will be Distributed Feb. 15, 1893.

Price of Rooted Cuttings: Per 1000, $80; 500 at 1000 rate; per 100, $10; 25 or less, $2 per doz.

ORDERS WILL BE FILLED STRICTLY IN ROTATION.

FOR SALE BY

N. F. McCARTHY & CO., 1 Music Hall Place, Boston, Mass.
C. J. PENNOCK, Kennett Square, Pa.
and E. H. HUNT, 79 Lake Street, Chicago.

PLANTS CAN BE SEEN AT THE ESTABLISHMENTS OF ANY OF THE ABOVE NAMED.

The Following Testimonials tell the Story:

SOUTH SUDBURY, MASS.—The new Carnation, Governor Russell, I consider a grand acquisition to the pink family. It is a pure white with a large flower on a long stiff stem. It is a beautiful shaped plant, and does finely as a pot plant. It does not burst its Calyx, and this is one of the main things in the keeping qualities of a Carnation. It is a great keeper and easy propagator, free bloomer and free from disease. JAS. TULIS.

MR. N. F. McCARTHY, Boston. DEAR SIR:—I am pleased to state that after an examination of nearly 1,000 plants of Gov. Russell Carnation I can endorse all that has been said in favor of it. While not the Ideal Carnation, yet I can rank it with the best in cultivation now as regard qualities requisite for a profitable florist flower. As large sized flower as Lizzie McGowan, but of better form and substance, calyx not splitting, a very free bloomer, and plants of a remarkably healthy constitution, more so, in fact, than most of the Carnations in cultivation now. Very respectfully yours, DENYS ZIRNGIEBEL.

MESSRS. N. F. McCARTHY & CO. GENTLEMEN:—Your favor of the 5th inst., asking my opinion of the Carnation Gov. Russell, is received. I have seen this Carnation at Reading three times, June, in September and December of the past year. In early June the old plants were a mass of buds and flowers, exceeding anything I had ever seen; the young plants were in field and looked well; in September the plants were being lifted and placed in greenhouses, and had been very severely pinched back—too severely for their good; in December there was a moderate amount of buds and bloom—the plants not having recovered from the heavy topping in early fall. My conclusion is, that one of its parents was Hinze's White, that it is inclined to be late if pinched back more than once in the season, that it is a strong, healthy plant, with robust constitution; the flower is from medium to large, of the Lizzie McGowan type, yet somewhat better in form; it does not burst its calyx, and has a fairly stiff stem. I observed that the lateral flowers were as large as terminals—a very high quality. I have given my opinion, based solely on what I saw the three visits made to Mr. Cumming's place at the times stated. Yours truly, R. T. LOMBARD.

SEE OUR PRICE LIST

in special carnation number of Jan. 19th, or address

EDW. SWAYNE, Carnationist,

. . . **Kennett Square, Pa.**

Rooted Carnation Cuttings.

WHOLESALE PRICE LIST NOW READY,

Containing a full list of best new and old sorts, including the Prize takers at MADISON SQUARE and PHILADELPHIA.

Address **H. E. CHITTY, Paterson, N. J.**

Rooted Cuttings.

	Per 100
Carnations, New Scarlet, Emily Pierson	$3 00
Leading varieties	1 25
Violets, Russian and Neapolitan.	
Coleus and Alternantheras in var.	

Chrysanthemums.

Stock plants, large clumps, one hundred best varieties, 15 to 25 cts. each.

ROOTED CUTTINGS. . . .

SEND FOR LIST.

A. N. PIERSON, Cromwell, Conn.

ROOTED CUTTINGS OF

CARNATIONS

All the leading varieties.
Fine stock Buttercup.

CHAS. T. STARR, Avondale, Chester Co., Pa.

ROOTED CUTTINGS OF

CARNATIONS.

LEADING VARIETIES.

S. J. BUNTING, 58th St. & Elmwood Ave., Phila., Pa.

Please mention the AMERICAN FLORIST every time you write to an advertiser.

ORANGE BLOSSOM

CARNATION.

One of the leading new varieties, and an immense bloomer; received a Certificate of Merit in 1891; color Pink, Edged White.

Rooted Cuttings, $3.00 per 100; $25.00 per 1000.

MAY FLOWER, splendid variegated, $2.50 per 100.
THE JENNINGS STRAIN OF PANSIES, trade packet, 2000 seeds, $1.00. Fine, stocky plants, small, 60c. per 100 by mail; $5.00 per 1000 by express.

E. B. JENNINGS,

Lock Box 254. SOUTHPORT, CONN.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser in these columns.

CARNATIONS ❋ AHEAD.

You want the best in the market! We have them, 16 Novelties of '93, and all the STANDARD VARIETIES! Send for our complete Price List.

GEORGE HANCOCK, Grand Haven, Mich.

Begonia Semperflorens Rosea.

A subscriber writes to again call our attention to the usefulness of this excellent begonia. He says: "It literally flowers all the year round, is a strong, healthy grower, of compact habit. It can hardly be surpassed for vases, baskets or table decoration, and as a market plant has few equals, selling at sight and being equally valuable as a pot plant and for bedding purposes. Fine plants 8 to 12 inches in diameter can be produced in a very short time, and then be sold for a better price than can be obtained for other plants that require more time to grow into marketable condition. Plants in 6-inch pots retail readily in Rochester, N. Y., at from 50 cents to $1 each."

Eucharis Amazonica.

How would you grow Eucharis Amazonica? What kind of soil would you use? Do they require much heat? Would you give them much water? Do they require light, or do they want to be shaded?

If some reader of the FLORIST will answer these questions I shall feel greatly indebted to him. BUFFALO.

IF YOU have not already ordered a copy of our directory and reference book you are missing a good thing that you ought to have. Remember that it contains not only a list of those in the trade but a vast amount of reference matter of great value to every reader of the FLORIST. The reference lists of roses, chrysanthemums and carnations are alone worth the price of the book.

THE AMERICAN FLORIST and *Gardening* together to one address for $1.75. Send orders to the American Florist Co.

E. G. HILL & CO.,

Wholesale Florists,

RICHMOND, INDIANA.

MEECH'S TUBEROUS BEGONIAS.

The Finest Strain in Existence.

For Prices see American Florist for January 26th, 1893.

SEED ALL SOLD.

Catalogue about March 15th.

F. J. MEECH & SON,

Charlevoix, Mich.

VERBENAS MAMMOTH BEST SORTS, CLEAN, HEALTHY,

$2.50 per 100; $20.00 per 1000.

Rooted Cuttings.....$1.00 per 100; $8.00 per 1000

Pelargonium Fred Dorner. .....$10.00 per 100

Cannas, French Tubers..... $5.00 per 100

Alternanthera - P. major. A. nana. .....$3.00 per 100

Fine stock H. P., Tea and Forcing Roses.

JOSEPH HEINL, Jacksonville, Illinois.

100,000 MARIE LOUISE VIOLET RUNNERS.

Very healthy. All in cold frame. Free from any disease. The flowers can be seen every day at the store of H. Hession, 216 West 23d St., New York.

Price $5.00 per 1000, Ready April 1.

Order early and mention American Florist.

FD. BOULON, Sea Cliff, L. I., N. Y.

10,000 Vinca Major Variegata Vines

Strong Rooted Cuttings.

$3.00 per 100; $25.00 per 1000. Cash with order.

MARTIN BRAENDLEIN, Mapleton, Indiana.

The three leading Florist Flowers:

CHRYSANTHEMUMS, CARNATIONS AND ROSES.

ALL THE NEW AND SELECTED STANDARD VARIETIES. . . .

My stock of all are as fine as can be produced at reasonable rates. Complete list of these will be mailed to all applicants in the trade.

JOHN N. MAY, Summit, N. J.

Mention American Florist.

AZALEAS FOR EASTER.

We carry in stock a full assortment of well furnished plants for Easter forcing and decorating, and will be pleased to book orders for shipping when weather moderates. The plants are in the best possible condition for shipping before the buds expand, and our friends will do well by ordering now rather than later when it is not safe to pack and forward any distance. We offer plants, 10 to 12 inches high, 10 to 12 inches in diameter, fine, bushy crowns, $5.00 per doz.; $40.00 per 100. Plants, 12 to 15 inches high and in diameter, $9.00 per doz.; $70.00 per 100. Specimen plants, 18 to 22 inches high and in diameter, $2.50 each; $30.00 per doz.

All the above are well set with buds and comprise the best market kinds.

HENRY A. DREER, 714 Chestnut St., PHILADELPHIA.

GROZY CANNAS.

WE ARE HEADQUARTERS . . for all the Novelties, and in addition control EXCLUSIVELY several grand varieties which we now offer for the *first time*. We will not be undersold on any of the list.

J. C. VAUGHAN,

New York: CHICAGO.

12 Barclay Street. P. O. Box 688.

Greenhouses: Western Springs. . . .

Mention American Florist.

IF YOU WISH TO GIVE YOUR BUSINESS A BOOM!

PUT IN THE

SNOW CREST DAISY

T'wil help to cheer the winter's gloom,
And make the times go aisy.

Stock practically unlimited. All this DAISY needs is to be seen seen to be appreciated. It can BLOW ITS OWN HORN and make it heard the length and breadth of the continent. Its popularity is spreading like a wild fire, and will soon supersede everything of its kind. We propose to put the price within the reach of all, and give you a big Woodbury dozen, 15 for a dollar; 100 for $5. Sample plant in bloom for 12 cents in stamps, post free if you wish.

Try Gibson's beautiful, scented hybrid Pansy seed—a few ounces left. 500 seed 30c.; 1000, 50c.; ¼ oz. $1.50; ½ oz. $2.50; oz. $4.00. Plants of same 60c. per 100; $5.00 per 1000.

New crop mammoth Verbena seed, splendid strain, in fine mixture, plenty of whites, intense crimsons and purples, with all the intermediate colors and tints, in packets of 1000 seeds, 50c.; ¼ oz. $1.10; ½ oz. $2.00. Our seedlings are up and growing nicely. Will have plenty of plants later.

Try the Dakota Primrose; you will be charmed with its great white, scented blooms, 2 to 3 inches across; 100 seeds, 25c.

Double fringed Dianthus, fine strain, all colors mixed, trade packet, 20c. Rooted Cuttings and small plants of our leading specialties later. Address, cash with order, please, J. C. GIBSON, Woodbury, N. J.

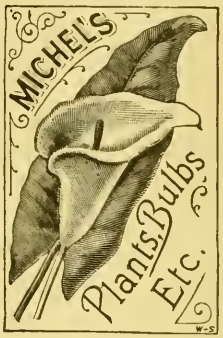
Mention American Florist.

Water Lily Seed.

	Trade pkt.	oz.
Nymphæa Zanzibarensis.....	.50	$4.00
" " azurea	.50	4.00
" Cærulea.....	.50	4.00
" Scutifolia.....	.50	3.00

Tubers and Plants of all leading varieties.

WM. TRICKER, Dongan Hills, N. Y.



Write for wholesale list.

MICHEL PLANT AND BULB CO.,

ST. LOUIS, MO.

ZIRNGIEBEL'S

NEW AND IMPROVED STRAINS OF

ASTERS—Parisian, extra Early Dwarf forcing, will bloom by Easter. Zirngiebel's Extra Market for general crop. Both strains in white or colors.

STOCKS—Early Dwarf White and Dwarf Yellow.

MIGNONETTE—New Golden, selected seed.

NEW PERPETUAL SCOTCH PINKS and our well-known strains of GIANT MARKET AND FANCY PANSIES.

Any of the above in trade packages at $1.00 each.

DENYS ZIRNGIEBEL,

Needham, Mass.

CLEMATIS.

	Doz.	Hundred
2 Year Choice Assortment.....	$1.00	$25.00
1 " " "	2.00	15.00
H. P. Roses, Choice named kinds....	1.50	10.00
Monthly " " "	1.25	8.00
Daisy Snowflake, strong plants.....	.50	3.00
Dahlias, field grown, choice named..	1.25	8.00

F. A. BALLER,

BLOOMINGTON, ILL.

—MORE THAN— 1,000,000 TREES

Fruit and Ornamental. SHRUBS, VINES, ROSES, etc., in over 1,000 Varieties.

New and Rare. Old & Reliable. Send for our Illus. Catalogues.

W. S. LITTLE & CO. ROCHESTER, N.Y. or 15 E. 40th St., N. Y. City

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

A NEW MUSHROOM

Mushroom Culture at the Doors of Everyone.

This new mushroom, obtained by Boulon, Florist, is the only one that has supplied the New York market and Delmonico from June until the end of Oct., 1892, daily.

Spawn offered for sale from March 15 in baskets of 5 lbs. Each shipment will be accompanied with directions for care and culture.

PER BASKET $5.00, CASH WITH ORDER.

Write for price on larger lots. I decline to send C. O. D.

FD. BOULON,
Sea Cliff, L. I., N. Y.

SURPLUS STOCK.

$3.00 per 100, 2-inch pots.

SMILAX, $25.00 per 1000.
PERENNIAL PHLOX, in ten best sorts.
ORIENTAL HARDY POPPY, largest of all.
CISSUS DISCOLOR, $2.00 per 100.
VERBENAS, fine varieties.
PANSIES, large-flowering selected strain.
ROOTED CUTTINGS of Vinca major, Harrisoni, $8.00 per 1000.
HARDY SHRUBS, ten best sorts, $30.00 per 1000.
DOUBLE PETUNIAS, $4.00 per 100.
PALMS, strong 1 year old seedlings, $5.00 per 100. Such as Corypha, Phœnix, Latanias.

For anything in the Florists' line, address

NANZ & NEUNER, Louisville, Ky.

120 page Catalogue free to all; also Wholesale Price List for Florists only.

DO YOU WANT

		Per 100
ALTERNANTHERAS rooted for $1 per 100; $8 per 1000		
COLEUS, 2 and 2½-in. pots		$ 4.00
GERANIUMS, single red, 2 & 2½-in. pots, mxt.		3.50
"	double red, 2 & 2½-in. pots, mxt.	3.50
"	in 3 and 3½-in. pots	5.00
BEGONIAS, stock plants, 4 and 5-in. pots		12.00

Rex and other best varieties.

If so, order soon of the

ELGIN ROSE CO.,
TELEPHONE 8.
519 Chicago Street, - - ELGIN, ILL.

VERBENAS.

Mammoth, clean, strong, well assorted, transplanted, $1.00 per 100; $8.00 per 1000. Lots of them ready now. Rooted Cuttings $6.00 per 1000. Must have room. Cheap; speak quick. Cash with order, or C. O. D.

W. B. WOODRUFF, Florist,
WESTFIELD, N. J.

CANNAS
CHRYSANTHEMUMS.

Lowest Prices for Choice Stock. List Free.

T. H. SPAULDING, Orange, N. J.

BY THE THOUSAND.

Araucaria excelsa, Aspidistra, Palms, Phormiums, Laurel, Bays, Crowns and Pyramids of all sizes.

Packing free for Cash with order.

THE NURSERIES. JULES DE COCK.
LEDEBERG, near Ghent, BELGIUM.

A Specialty Bulb Begonias, extra vars. at $3 per 100.

CHEAP TO MAKE ROOM.

French Cannas, dormant roots of fine sorts, $2.00 per 100; $15.00 per 1000.
Canna Flaccida, all sold.
Nymphæa Flava, $1.50 per dozen; $10.00 per 100.
Nelumbium Speciosum, 1 year seedling, white and red, double and single mixed, $3.00 per dozen.

MISS LIZZIE FREEMAN,
1203 East Avenue. AUSTIN, TEXAS

PYRETHRUM ULIGINOSUM (GIANT WHITE DAISY)

* * * * *

This is a good thing for cutting. Will flower first season from seed if sown early.

☞ Fresh Seed Crop of 1892. ☜

Trade pkts., 50c. and $1.00.

John Gardiner & Co.,
21 N. 13TH STREET,
PHILADELPHIA, PA., U. S. A.
Seed Growers,
Importers and Dealers.

☞ Trade list on application, but *for those in the trade only.*

TIME

. . FOR DISTRIBUTION OF . .

▲ ▲ ▲ **NEW CHRYSANTHEMUMS** is near at hand.

Send us a list of your wants and let us make you a price before ordering. Also mention any of the older sorts you require.

NATHAN SMITH & SON,
167 W. Maumee St., ADRIAN, MICH.

Dreer's Double Petunias.

We offer a splendid lot in fifteen varieties of the best market sorts. The set is composed of the finest double fringed sorts, and equal to any ever sent out. Strong stock plants from 3-inch pots. $1.25 per doz ; $1.50 for set, or $10 per 100 all named.

HENRY A. DREER, 714 Chestnut St., Philadelphia.

Rooted Cuttings

of Evergreens, Hardy Flowering Shrubs and Hardy Perennials (Achillea, iberis, etc.) raised on contract for spring delivery. SEND LIST OF WANTS.

. . . *ISAAC C. ROGERS, MOORESTOWN, N. J.*

Rooted Cuttings.

Carnations Hinze's White, Mrs. Fisher, Silver Spray, Jeannette, Grace Wilder, Fred Creighton, Mayflower, Century, Anna Webb, $1.50 per 100; $10 per 1000.

Orange Blossom, Portia, Hector, Florence, American Flag, $2 per 100; $15 per 1000.

Coleus, leading varieties, including the finest Yellow Coleus in cultivation. A new variety equal to Golden Bedder in color, and as good a grower as C. Verschaffeltii, $1.00 per 100; $8.00 per 1000.

Double Petunias in four finest varieties, $2.00 per 100.

Fuchsias, finest named varieties, $1.50 per 100.

Heliotrope $1.00 per 100.

Ageratum, Dwarf, White and Blue, $1.00 per 100.

500 at 1000 rates. Cash with order. 10 cents per 100 extra when shipped by mail.

JAMES HORAN, Florist,
BRIDGEPORT, CONN.

Are You a Fruit or Flower Raiser? For Market or Pleasure—

If so, send for our Circular on Fungicides and Insecticides, which are **cheap** and **reliable.** Agents in every State. **Special Fertilizers** for Fruits, Flowers and Vegetables. Agricultural Chemicals. **W. S. POWELL & CO.,** Chemical Fertilizer Manufrs, **Baltimore, Md.**

S. F. LEONARD, Seedsman, Agent, Chicago, Ill.

Siebrecht & Wadley,

ROSE HILL NURSERIES,

NEW ROCHELLE, N. Y.

Palms,
ORCHIDS,
Roses,
and New Plants.

FRESH DRACAENA CANES NOW READY.

Mention American Florist.

ORCHIDS.

The Finest Stock in the World.

SANDER'S,
ST. ALBANS,
ENGLAND.

Thirty minutes from London.

Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City.

Orchids Cheap as Good Roses.

BRACKENRIDGE & CO.,

Established 1854. **Govanstown, Md.**

PRICE LIST FREE.

1,000,000 CANE STAKES

Recent Legal Decisions.

Participation in profits creates the liability of a partner.

Persons who participate in the profits of a trade or business ostensibly carried on by another are liable for contracts made and credits given during the existence of the partnership. The credit is not presumed to have been given on the sole and separate responsibility of the ostensible partner, but binds all for whom the partner acts, if done in their business and for their benefit, to the same extent as though the partnership had been open and avowed.

Pitkin vs. Beufer. Supreme Court of Kansas. 31 Pac. Rep. 695.

Responsibility between vendor and purchaser for goods delivered to carrier.

Where the vendor is bound to send the goods to the purchaser, delivery to a common carrier is a delivery to the purchaser; but if he sells goods, undertaking to make the delivery himself at a distant place, thus assuming the risks of the carriage, the carrier is his agent, and not the purchaser's, and he is responsible for the negligence or misconduct of his agent.

Braddock Glass Co. vs. Irwin. Supreme Court of Pennsylvania. 25 At. Rep. 490.

Carriers can not make only limited liability contracts.

Bearing in mind that the liability of a common carrier at common law is that of an insurer, a most important decision for shippers is that where a carrier, as a railroad company for instance, affords them no opportunity to contract for the transportation of freight under its common-law liability, but receives it only upon condition that exemption be accorded the carrier, a contract containing such exemption is void, and the fact that it was entered into knowingly by a shipper, and without demand for any different contract, makes no difference.

Little Rock & Ft. S. Ry. Co. vs. Cravens. Supreme Court of Arkansas. 20 S. W. Rep. 803.

Liability of Express Companies for goods sent C. O. D.

An express company's duty with regard to goods expressed C. O. D. is as a common carrier to safely carry the goods to their destination, to notify the consignees of their arrival, and to offer delivery upon payment of the amount, and with such performance its liability as a common carrier terminates. Its further duty is to safely store and care for the goods, hold them a reasonable time to enable the consignees to pay, if they are not ready to pay immediately, and then to notify the consignors, but its liability meanwhile is only that of warehouseman, so that if the goods are destroyed by fire in the company's store-house, without its fault, the loss will be the consignors, and not the express company's.

Hasso vs. American Express Co. Supreme Court of Michigan. 53 N. W. Rep. 918.

P. SEBIRE & SONS,

Nurserymen, USSY, Calvados, France,

A general assortment of Fruit Tree Stocks such as Apple, Pear, Myrobolan Plum, Mahaleb and Mazzard Cherry, Angers Quince, Small Evergreens, Forest Trees, Ornamental Shrubs, Roses, etc. The largest stock in the country. Prices very low. Packing secured. Catalogue free. Send for quotations before placing your orders elsewhere. Agents for U. S. America and Canada.

C. C. ABEL & CO., P. O. Box 920, New York.

Mention American Florist.

BULBS AND TUBERS.

Tuberous Rooted Begonias, Fancy Leaved Caladiums, Crassifolia Gloxinias, Double, Single and Cactus Dahlias.

We offer the following bulbs, largely grown by ourselves, extra fine stocks and first-class in every way. Desirable and salable varieties to be offered in retail circulars and catalogues.

	Per doz.	Per 100
AMARYLLIS Formosissima	$1.00	$ 7.00
Johnsoni	4.00	30.00
Vittata	2.50	20.00
BEGONIAS, Tuberous Rooted, Finest mixed Singles, per 100 $6.00, per 1000 $50.00.		
" " " " Double	1.50	12.00
" " " " Single, Scarlet, Crimson, Yellow, White, Orange and Pink	1.00	7.00
DAHLIAS Pompone, Show Cactus, and Single varieties in fifty finest named sorts, strong ground roots	1.50	12.00
DIELYTRA SPECTABILIS, strong clumps	1.00	6.00
GLOXINIA CRASSIFOLIA in the finest mixture, extra selected bulbs	1.50	12.00
First size	1.00	10.00
Second size	.75	8.00
CALADIUMS, fancy leaved varieties in thirty distinct named sorts	2.00	15.00
IPOMEA PANDURATA	.50	4.00
TIGRIDIAS Conchiflora	.50	3.00
Grandiflora	.50	3.00
" Alba	.50	3.00

Orders booked now and reserved until weather moderates or shipment requested.

HENRY A. DREER, 714 Chestnut Street, PHILADELPHIA.

NOTE: In this adv. in previous issues, through a typographical error, "per 100 and per 1000" was inserted in the column under "per doz. and per 100," making it appear that all the following quotations were "per 100 and per 1000," when they were, really, "per doz. and per 100," the 100 and 1000 applying only to the single mixed tuberous-rooted begonias.—PUBLISHERS AM. FLORIST.

100,000 VERBENAS. THE CHOICEST VARIETIES IN CULTIVATION.

Fine pot plants, $2.50 per 100; $20 00 per 1000 Rooted Cuttings, $1 00 per 100; $8 00 per 1000.

NO RUST OR MILDEW.

Packed light, and satisfaction guaranteed. Send for circular. . . .

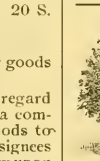
Our sales reached nearly 250,000 last year, and we can assure our customers that our plants are fully equal, and assortment of varieties surpass those of last year.

J. L. DILLON, Bloomsburg, Pa.

FOSTITE. A successful remedy against MILDEW and RUST on Plants. Price, per 25 pounds, $2.00.

JOOSTEN'S MAGAZINE BELLOWS. The best Powder Distributor. Price, $3.50. Sold by leading dealers, and by

C. H. JOOSTEN, 3 Coenties Slip, New York.



SHADE TREES.

For Streets, Parks and Lawns.

50,000 Carolina Poplars, 10,000 Lombardy & VanGerts, 30,000 Silver Maples, 10,000 Ash Leaf Maples, 10,000 Sugars and Norways Elms, Lindens, Planes, &c. Fruit and Nut Trees, Small Fruits. Catalogue Free.

WM. PARRY, - PARRY, N. J.

Tuberous Begonias.

Tubers of large flowering single Begonias, white, yellow, red, per 100 $6.00; mixed $5.00. Customers may at the same time order some young plants. We ship them then when they are of the right size; this is important, as they grow very fast and soon get too large for mailing. Ready in April at $3.00 and $2.50 per 100.

BRAUER & RICHTER, McConnellsville O.

ONE MILLION

Trees, Shrubs, Decorative Herbaceous Plants, etc. for landscape gardeners, parks, cemeteries and private gardens.

Catalogues free. Prices low. . . .

B. M. WATSON,

Old Colony Nurseries, PLYMOUTH, MASS.

COLEUS AND GERANIUMS

Cuttings and potted plants. Wholesale and Retail. . . . .

CHAS. A. BAIRD, Manalapan, Mon. Co., N J

New and Rare Plants

ORCHIDS, ETC.

A large collection of Hothouse and Greenhouse Plants, carefully grown at low rates.

A collection of the most beautiful Fancy Caladiums ever offered. Pelargoniums, Etc.

Peonies—All the finest old and new.

Orchids—A very extensive stock; East Indian, Mexican, Central and South American, Etc.

Hardy Perennials, Roses, Clematis, Phlox, Etc.

New and Standard Fruits; rare and beautiful Trees and Shrubs, Evergreens, Etc.

CATALOGUES ON APPLICATION.

JOHN SAUL, Washington, D. C.

Mention American Florist.

NOVELTY FOR 1893!

Variegated Hop.

(ROEMERS.)

Most ornamental and fast growing Climber. Descriptive list, as well as of other EXTRA CHOICE FLOWER SEEDS free on application.

FRED. ROEMER, Seed Grower,

QUEDLINBURG, GERMANY.

C. C. Abel & Company

P. O. Box 920, NEW YORK,

FLORIST'S, NURSERYMEN'S AND SEEDSMEN'S AGENTS,

—For the following—

WELL KNOWN AND RELIABLE HOUSES,

For whom we solicit your orders:

C. G. VAN TUBERGEN, Jr., Florist and Seedsman, Haarlem, Holland. Choice Dutch Bulbs, Novelties, etc.

PIERRE SEBIRE & SONS, Nurserymen, Ussy, France. Roses, Evergreens, Fruit and Forest stocks.

ERNST RIEMSCHNEIDER, Florist and Seedsman, Altona, Germany. Berlin Lily of the Valley a specialty.

EDM. VAN COPPENOLLE, Nurseryman, Ghent, Belgium. Established 1850. Large culture of Araucarias, Azaleas, Indica and Mollis, Bay Trees, Begonias, Gloxinias, Palms, Rhododendrons, etc., etc.

ALPHONSE ROCHE, Ollioules, France. Extensive and special plantation of Immortelles and dyed in all colors and shades.

ERNEST RIEMSCHNEIDER, Florist and Seedsman, Altona, Germany. Choice selections of German Flower Seeds. Also of Palms, Grass and Garden Seeds. Best Sugar Beet Seeds a Specialty.

Catalogues (mention which) free on application when received for distribution.
All orders for these houses should be plainly written and addressed to us.

Mention American Florist.

Magnolias.

IN VARIETY.

Cydonia Japonica.

ALL SIZES FOR HEDGING BY THE 1000.

Eulalias.

4 VARIETIES.

Send for wholesale price list of all kinds of hardy ornamental stock.

SAMUEL C. MOON,
Bucks County, MORRISVILLE, PA.

Mention American Florist.

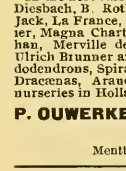
Association "Flora"

BOSKOOP, HOLLAND.

Now on hand in New York:
CLEMATIS, 3 Years, per 100, $30.00
H. P. ROSES, for forcing, " 9.00
In the best variety, as Alfred Colomb, Anna de Diesbach, B Rothschild, Fisher Holmes, Gen. Jack, La France, Mme. G. Luizet, Mme. Plantier, Magna Charta, Paul Neyron, P. C. de Rohan, Merville de Lyon, Perle des Blanches, Ulrich Brunner and other sorts. Azaleas, Rhododendrons, Spiræas, etc. We also have Palms, Dracænas, Araucarias and Bay Trees at our nurseries in Holland. Catalogue on application.

P. OUWERKERK, 206 Cambridge Ave.,
JERSEY CITY, N. J.

Mention American Florist.



TRY DREER'S GARDEN SEEDS

Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly, mailed free to the trade only.

HENRY A. DREER,
Philadelphia

No Trees of 1st quality can ever be sent by mail. Mayhap you know it. By freight, prepaid if preferred, we ship safely 4, 5, or 6 ft. trees; 2-yr. Roses of rare excellence—everything! You actually pay less than for the puny stuff. 1,000 acres Nurseries. 20,000 acres Orchards. Exact information about trees and fruits. Stark Bros., Louisiana, Mo.

W. C. KRICK'S

PATENT

Florists' Letters, Etc.

Highest Award wherever exhibited.

These Letters are made of the best immortelles, wired on wood or metal frames having holes drilled in them to insert toothpicks, by which to fasten them in the design. All infringements prosecuted.

2-inch Letters, $3 00 per 100.
Postage, 15c. per 100.

Before purchasing send for free sample and Catalogue and compare with any other latter in the market.

W. C. KRICK, 1287 Broadway, BROOKLYN, N. Y.

Agents:—J. C. VAUGHAN, Chicago, Ill.; H. BAYERSDORFER & Co., Phila., Pa.; N. STEFFENS, N. Y.; AUG. ROLKER & SONS, N. Y.; ED. S. SCHMID, Washington, D. C.; JAMES VICK'S SONS, Rochester N. Y.; T. W. WOOD & SONS, Richmond, Va.; J. A. SIMMERS, Toronto, Ont.

Mention American Florist.

If You Think any kind of a crop will do, then any kind of seeds will do; but for the best results you should plant

FERRY'S SEEDS.

Always the best, they are recognized as the standard everywhere.
Ferry's Seed Annual is the most important book of the kind published. It is invaluable to the planter. We send it free.

D. M. FERRY & CO.
DETROIT, Mich.

CANE PLANT STAKES

The Best and Cheapest Stake.

Price, 5 to 6 ft. long, $4.50 per 1000. Freight prepaid within 500 miles on lots of 1000 or over. Send cash with order.

F. WALKER & CO.,
644 4th Ave., LOUISVILE, KY.

CATALOGUE PRINTING, ELECTROTYPING.

Done with expert ability for Florists, Nurserymen, Seedsmen. Write to

J. Horace McFarland Co.,
HARRISBURG, PA.

BOSTON FLORIST LETTER CO.,

13 Green Street, BOSTON, MASS.
Address all correspondence to 1 Music Hall Place.

Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1½-inch and 2-inch, $2.00 per 100. Patent fastener with each letter.

With orders for 500 letters we give away a nicely stained and varnished box. See cut in next week's American Florist.

Our letter is handled by all the wholesalers in Boston.
AGENTS: Marschuetz & Co., 25 N. 4th St., Philadelphia, Pa.; A. Rolker & Sons, New York; F. E. McAllister, 22 Dey St., N. Y.; E. Kaufman, Philadelphia; H. Bayersdorfer & Co., Philadelphia, Pa.; A. D. Perry & Co., 33 Warren St., Syracuse, N. Y.; A. C. Kendal, 115 Ontario St., Cleveland, O.; E. H. Hunt, 79 Lake St., Chicago; Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.; H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O.; T. W. Wood & Sons, 6th and Marshall Sts., Richmond, Va.; Jas. Vick's Sons, Rochester, N. Y.; Dan'l B. Long, Buffalo, N. Y.; C. A. Kuehn, St. Louis.
J. A. Simmers, Toronto, Ont., Agt. for Canada.

LITTLE'S ANTIPEST.

—A—

Valuable Discovery of the 19th Century.

SILVER MEDAL AWARDED

—BY THE—

CALIFORNIA STATE FAIR OF 1890.

This preparation is a sure destroyer of the **Scale, Wooly Aphis** and **Insect Pests** of any and all descriptions. It may be as freely used in the conservatory, garden and greenhouse as in the orchard or vineyard. It is non-poisonous and harmless to vegetation when diluted and used according to directions. It mixes instantly with cold water in any proportion. It is **Safe, Sure** and **Cheap.** No fruit grower or florist should be without it.

Send for Circulars and Price List.

R. W. CARMAN, General Agent,
291 AMITY STREET,
FLUSHING, Queens, Co., N. Y.

CUTS!

Wood Engraving,
Zinc Etching,
Half-Tone,
Wax Engraving, Photo-Engraving,
Designing.

MANZ & CO.,
183 Monroe Street, CHICAGO, ENGRAVERS.

Heating with Hard Wood.

In reply to the question of heating with hard wood, on page 686 of the FLORIST for February 9, our opinion is as follows: The first requisite is a boiler with a long fire box and a large feed door, capable of admitting wood of large size and not less than four feet in length. Again, perfect control of the draft is necessary, for, as wood is consumed more rapidly than coal, methods should be employed to regulate the admission of air beneath the fuel, and the escape of smoke and heat above. This can be obtained by the use of an air-tight damper in the ash pit and a regulator in the smoke flue. If E. D. C. of Midland, Canada, will send his address and enclose stamp we will give him pointers we have from experience.

Evansville, Ind. J. D. CARMODY.

Denver, Colo.

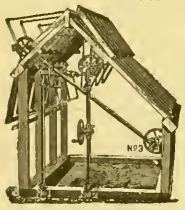
The Denver Florists' Club gave their initial ball February 10 in the Mining Exchange Hall, which was most appropriately decorated for the occasion. President Forsythe led the march. The ladies present were liberally supplied with flowers, which was a new feature here. Mr. Wm. Clarke and other florists from Colorado Springs were present.

QUEEN CITY.

Patents Recently Granted.

Transplanter, J. O. & H. H. Bender, Fayetteville, N. Y.; Lawn Sprinkler, J. Jett, Walla Walla, Wash.; Broadcast Seeder, E. H. Grafunder, Horicon, Wis.; Transplanter, C. D. Manwaring, C. C. & F. G. Nagley, Memphis, N. Y.

THE STANDARD Ventilating Machines



Received best awards at BUFFALO, N. Y., BOSTON, MASS., TORONTO, ONT.

Send for Catalogue and prices.

E. HIPPARD, Youngstown, O.

W & C. CO. LIMITED

Wrought Iron Pipe, Fittings, Valves, ETC.

78 JOHN ST., NEW YORK.

WELLS & COUTAN CO., L'td.

Mention American Florist.

GREEN SILKALINE.

FOR STRINGING SMILAX & ASPARAGUS.

Warranted not to Fade.

ALSO ALL KINDS OF BOUQUET THREAD.

JOHN C. MEYER & CO.,

289 Devonshire St., BOSTON, MASS.

When writing mention American Florist.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.

JOHN G. ESLER, Sec'y F. H. A., Saddle River, N. J.

Always mention the American Florist when writing to advertisers.

"Standard" Flower Pots.

As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address

The Whilldin Pottery Company,

BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.

Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.

Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.

A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.

We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.

SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY,

Manufacturing the

ELVERSON, SHERWOOD & BARKER

STANDARD FLOWER POTS.

Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bud Pots, etc.

ADDRESS PITTSBURGH CLAY MF'G CO., New Brighton, Pa.

H. M. HOOKER COMPANY,

57 and 59 W. Randolph Street, CHICAGO,

NATURAL GAS MADE GLASS

FOR GREENHOUSES.

Write for latest prices.

THE BEST POTS.
THE CHEAPEST.
THE LOWEST FREIGHT RATES.
THE BEST OF PACKING.
THE LARGEST POTTERY IN THE STATE FOR MAKING STANDARD FLOWER POTS.

PRICE LIST OF POTS.

	Per 1000		Per 100
2 inch	$ 3.25	6 inch	$ 2.20
2½ "	3.50	7 "	3.50
2½ "	4.00	8 "	5.00
3 "	5.00	9 "	7.50
3½ "	7.25	10 "	10.00
4 "	9.00	11 "	15.00
5 "	13.80	12 "	20.00

Terms: Cash, free on board cars here. Address

HILFINGER BROS., Potters

FORT EDWARD, N. Y.

U. S. AND FOREIGN PATENTS Trade Marks, Designs, Opinions, Searches, &c., promptly attended to. Send sketch or model for free examination as to patentability. All work strictly confidential.

GEO. H. CHANDLEE,

Atlantic Building, WASHINGTON D.

Mention American Florist

PLANT BED CLOTH.

CHEAP SUBSTITUTE FOR GLASS on Hot-beds, Cold Frames, etc. Three grades.

Light, Medium, Heavy.

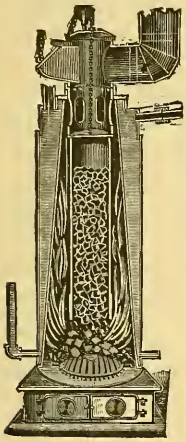
Used by Florists, Gardeners, etc., invaluable for Tobacco Growers. Protects from frost. Promotes, hardy, vigorous growth and keeps beds warm; will not shrink or mildew. For sale by the leading Dry Goods houses, Seedsmen, Florists, etc. Well known and extensively used. For circulars and samples apply

NATIONAL WATERPROOF FIBRE CO.,

50 South Street, - - NEW YORK.

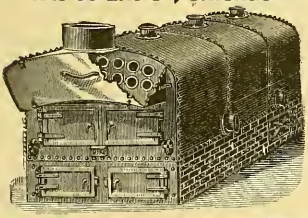
Agents Wanted.

Mention American Florist.



THE WILKS HEATER,
FOR HEATING
GREENHOUSES, STORES, DWELLINGS, ETC.
Manufactured by THE S. WILKS MF'G CO. 123 S. Clinton St., CHICAGO, ILL.
SEND FOR CATALOGUE.

KROESCHELL BROS.
IMPROVED
Greenhouse ×× Boiler,
41 to 55 Erie St., CHICAGO.



Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around (front, sides and back). Write for information.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

Clear Cypress,

from bottom gutter up is my specialty.

Lyman Felheim,
ERIE, PA.

Mention American Florist.

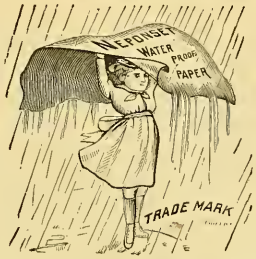
YOU CAN SAVE MONEY BY PURCHASING, AND GLASS BY USING
Hamilton's Patent Sash Lifter.

The best thing of the kind ever invented, for either high or low greenhouses. Send for description and price list.

BAY STATE HARDWARE CO.,
272 Freeport St., BOSTON, MASS.

NEPONSET ◆ FLOWER ◆ POTS

of Waterproof Paper, light, durable, unbreakable and cheap.



Tomato Growers have used them with success and proved their appreciation by repeated orders.
Cabbage Growers have tried them and duplicated their orders.
Market Growers of Verbenas, Alyssum, Coleus and other plants, which do not shun moisture, have used them extensively in repeated seasons.
Recommended for light and safe packing of tender and valuable plants, for the marketing of Ferns, Dutch Bulbs, Lily of the valley and the like.
Cost about 40 per cent less than earthen pots, and weight considerably lighter, thus saving in first cost and freight.

For Price List and further particulars address

Wholesale Agents:
AUGUST ROLKER & SONS, Station E, New York.
R. & J. FARQUHAR, - - - - Boston, Mass.

Who furnish samples, by mail, postpaid, on receipt of

	10 cts.	11 cts.	14 cts.	17 cts.	22 cts.	40 cts.	60 cts.
For 1 dozen	2¼-in.	2½-in.	3-in.	3½-in.	4-in.	5-in.	6-inch pots.

F. W. BIRD & SONS, Sole Manufacturers, EAST WALPOLE, MASS.

C. Hennecke Co.

MILWAUKEE, WISCONSIN,

MANUFACTURERS OF

Standard Greenhouse Pots,

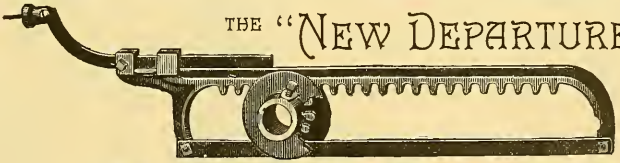
WIRE DESIGNS, LAWN VASES, ETC.

The superiority of our goods is acknowledged by all that have used them.

WRITE FOR OUR NEW CATALOGUE AND DISCOUNT SHEET.

Mention American Florist.

THE PEOPLE USE THE "NEW DEPARTURE"



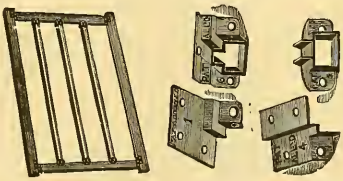
SEE WHAT THE PEOPLE SAY:

RUXTON, BALTIMORE CO., MD.

J. D. CARMODY, Evansville, Ind., *Dear Sir:*—Enclosed find check for $50.00, amount of your bill. I have put up the Ventilating Apparatus, and it works well. It certainly is easily put up and light, though solid and strong enough for the work, which, by the "New Departure," is made a good deal lighter, as only the actual weight of the Ventilators is on the Apparatus. I shall want some more in a short while.

THEO. ECKARDT & CO.

J. D. CARMODY, Evansville, Ind.



GARDENERS HOT-BED SASH.
INDESTRUCTIBLE.
CYPRESS GREENHOUSE WOOD WORK OF ALL KINDS.
Write for prices.
THE PEIRCE & COLEMAN CO.,
Dayton, Ohio.

J. C. VAUGHAN, Agent for Chicago and New York.

Index to Advertisers.

Abel C C & Co.....712 713
Adv Rates, etc.....704
Anchorage Rose Co ..703
Baird Chas A.....712
Baller F A.....710
Barnard W W & Co....707
Bay State Hdw Co.....715
Bayersdorfer H & Co..701
Baylis Henry W.....703
Berger H H & Co.....707
Bird F W & Son 715
Bock Wm A.....708
Bonsall Jos E & Son...705
Boston Letter Co.....713
Boulon F 710 711
Brackenridge & Co.....711
Braendlein M W.....710
Brague L B.....707
Brauer & Riehter ..712
Bunting S J.....703
Burns & Raynor.....705
Burpee W Atlee & Co..707
Burrow J G.....708
Burton John.....703 704
Carman R W.....713
Carmody J D.....715
Chandlee Geo F 714
Chicago Cut Flower Ex 704
Chitty H E.....709
Clark B L 708
Corbrey T J & Co.....705
De Cock Jules 711
De Lamater Iron Wks.716
Dillon J L.....712
Dreer H A .710 711 712 713
Elgin Rose Co 711
Elliott W H.....704
Ellison Wm.....704
Evans Charles F & Bro 703
Faust H G & Co 707
Felheim Lyman.....715
Ferry D M & Co 713
Field S B.....708
Freeman Lizzie 711
Gardiner J & Co.....711
Gibson J C.....710
Gregory J J H & Son 702 707
Hall Ass'n.....714
Hancock Geo 709
Hansen Christ 708
Hart James 705
Hart Michael A 705
Hartford H E.....704
Heinl Jos.....710
Henecke Co C.....715
Herr Albert M.....708
Hews A H & Co.....714
Hilfinger Bros.....714
Hill E G & Co.....710
Hippard E 703 714
Hitchings & Co.....716
Hooker H M Co.....714
Horan Edw C.....705
Horan James.....711
Huiselosch Bros.....707
Hunt E H.....705
Hunt M A.....703
Hunter & Purdy.....705
Jennings E B.....709
Joosten C H.....712
Kaufmann Ernst & Co.704
Kennicott Bros.....705
Koffman E.....704
Krick W C.....713
Kroeschell Bros.....715
Kuehn C A.....704
Lampert J J 708
Larkin Isaac.....709
La Roche & Stahl.....705
Little W S & Co 710
Lockland Lumber Co...716
Lombard R T.....709
Long Dan'l B.....704
McBride Alex.....709
McCarthy N F & Co.....705
McFarland J H.....710
McFarland J H Co.....713
McGowan John.....709
Manz J & Co.....713
Marschnetz & Co.....704
May John N 710
Meech F J & Son 710
Meyer John C & Co 714
Michel Plant & Bulb Co 710
Millang Bros.....705
Moffatt G J.....705
Moninger Jno C.....716
Moon Samuel C.....713
Moore Frank L.....703
Mullen Geo.....704
Nagel E & Co.....708
Nanz & Neuner.....703 711
National Flire Co 714
Niles Centre Floral Co.705
Olson M 705
Ouwerkerk P.....713
Parry Wm 712
Peck & Sutherland.....705
Peirce & Coleman Co. 715
Pennock C J 708
Pennock F M.....708
Pennock Sam'l S.....705
Pierson F R Co.....707
Pittsburg Clay Mfg Co 714
Powell W S & Co.....711
Randall A L.....705
Reed & Keller.....714
Renard Joseph.....708
Riemann H W 708
Rimbland Benj.....707
Roberts D H.....716
Roehrs Theo.....705
Roemer Fred 712
Rogers Nurseries.....711
Rolker A & Sons 704
Russell Governor 709
Russell S J.....707
Salter Bros.....703
Salzer John A 703
Sander & Co.....711
Saul John.....712
Schulz Jacob.....703
Scollay John A.....716
Sebire P & Sons.....712
Siebmire W R 709
Sheridan W F.....705
Sherwood Hall Nur ..707
Siebrecht & Wadley....711
Siptle Dopfiel & Co.....714
Situations, wants.....705
Smith C A Floral Co. 705
Smith Nathan & Son...711
Spaulding T H.....711
Stark Bros 703 713
Starr Chas T.....708
Stoll Garden Imp Co ..713
Strauss C & Co. ... .702
Styer J J 709
Sunderbruch H L.....704
Swayne Edw.....705
Swayne Wm.....709
Teltenthal Oscar 705
Trieker Wm.....710
Vaughan J C.....710
Walker F & Co.....713
Washburn Andrew.....708
Watson B M 712
Weeber & Don.....707
Welch Bros.....705
Wells & Coutan Co.....714
Whilldin Pot Co.....714
Wight W P.....716
Wilks S Mfg Co.....715
Winter N D.....706
Wisconsin Flower Ex.707
Wood Bros.....708
Woodruff W B.....711
Zirnglebel D.....710

YOU CAN'T AFFORD to do business without a copy of our new trade catalogue and reference book.

When writing to any of our advertisers on this page please mention the AMERICAN FLORIST.

GoodellHH
Mass Agri Col
15 Dec 93

CYPRESS GREEN HOUSE MATERIAL

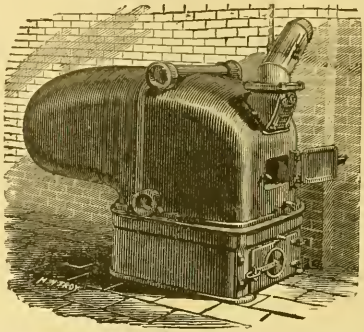
CLEAR CYPRESS SASH BARS

HOT BED AND VENTILATING SASH

JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

GREENHOUSE HEATING AND VENTILATING

Horticultural Architecture and Building.



HITCHINGS & CO.

Established 1844.

233 Mercer St., New York.

FIVE PATTERNS OF BOILERS.

NINTEEN SIZES.

Perfect Sash Raising Apparatus.

Rosehouses, Greenhouses, Etc., of Iron Frame Construction, Erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frame Benches with the "Perfect Drainage Bench Tile" or Slate Top.

SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUE.

Mention American Florist.

THE "LOCKLAND" Sash Bars

ARE ALWAYS SATISFACTORY.

This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.

GUTTER MATERIAL, RIDGES, SASH, ETC.

The finest CLEAR CYPRESS used.

Write for circulars and estimates.

LOCKLAND LUMBER CO.

Lockland, O.

Mention American Florist.

RIDER

Do You Want A RELIABLE SUPPLY OF WATER

Conservatory, Lawn, House, Garden, Stock or any other purpose, WITHOUT EXPENSE OF TIME OR LABOR?

All of this can be accomplished by using the Improved RIDER OR ERICSSON HOT-AIR PUMPING ENGINE

For Your GREEN HOUSE, ROSE HOUSE, NURSERY,

ERICSSON

Catalogue with full particulars, sent on application.

DE LAMATER IRON WORKS, 21 CORTLANDT ST., NEW YORK, N.Y.

FIRST-CLASS CERTIFICATE OF MERIT.

PERFECT DRAINAGE **BENCH TILE** • Used by all the leading Growers and Horticultural Builders.

For testimonials, circulars, etc., address W. P. WIGHT,

UPLAND GREENHOUSES, : : : MADISON, NEW JERSEY

GREENHOUSE HEATING AND VENTILATING.

Superior Hot Water Boilers.

JOHN A. SCOLLAY,
74 & 76 Myrtle Ave., Brooklyn, N.Y.
Send for Catalogue.

Mention American Florist.

D. H. ROBERTS,
159 & 161 South 5th Ave., New York.

NATURAL GAS MADE GLASS for Rose Houses, Conservatories, etc., etc. Our glass received the highest award at the Boston Convention of the S. A. F.

Mention American Florist.

FLORAL DESIGNS

The Cut Flower Worker's friend. Fine book of 160 pages. Send $3.50 for it, to HORACE McFARLAND, Harrisburg, Pa.

THE AMERICAN FLORIST

A WEEKLY JOURNAL FOR THE TRADE

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, FEBRUARY 23, 1893.** **No. 247**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company. Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,

323 Dearborn Street, CHICAGO.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis, Mo., August 9 to 12, 1893.

CONTENTS.

American Carnation Society meetiug 717
Buffalo 719
Carnation diseases (with 34 figures) 720
Growing new varieties of carnations 728
Sports and variations 729
Diseases of the carnation (with 4 figures) . . . 731
Seasonable carnation hints 734
Miscellaneous seasonable hints 734
Philadelphia 734
New York 735
Boston 735
Chicago 735
Baltimore 735
Catalogues received 736
Roses—A rose problem 738
The seed trade 742
Worcester, Mass. 744
Toronto 746
Tulip La Reine 746
Violets 748
Milwaukee 750

THE Society of Indiana Florists has issued an advance premium list for its seventh annual chrysanthemum show, to be held at Indianapolis, November 7 to 11 next. Copies may be had on application to the secretary, Mr. W. G. Bertermann, 37 Mass. avenue, Indianapolis, Ind.

NEW ORLEANS.—Applications for premium lists for the sixth annual exhibition of the New Orleans Hort. Society should be addressed to the secretary of the society, Mr. Chas. Wise, corner Prytania and Third streets, and not to the chairman of the committee of arrangements, as previously announced in our columns.

DO YOU WANT an alphabetical list of the chrysanthemums in commerce in America, with class and a brief accurate description of each one, and synonyms noted? You will find such a list in our new trade directory and reference book.

IF YOU have not already ordered a copy of our directory and reference book you are missing a good thing that you ought to have. Remember that it contains not only a list of those in the trade but a vast amount of reference matter of great value to every reader of the FLORIST. The reference lists of roses, chrysanthemums and carnations are alone worth the price of the book.

Meeting of the American Carnation Society at Pittsburg, Pa., February 21-22, 1892.

The thermometer registered 2° above zero when the vanguard of the delegates began to arrive on Tuesday morning at the Hotel Schlosser, Pittsburg, the headquarters of the American Carnation Society. Some of the trains were late in arrival but everybody was on hand by noon time, and were soon gathered in groups about the tables in the exhibition room watching with intense interest the opening of the different boxes of big long stemmed blooms.

The Pittsburg and Allegheny Gardeners and Florists' Club had been at work putting the hotel into proper shape for the reception of the brethren, and the corridors, parlors and other parts of the building were profusely decorated with groups of elegant palms and other show plants, which had been arrayed under the guidance and direction of the genial Mr. Robt. C. Patterson, who had been selected by the local people to take full charge of the entire arrangements of welcoming the guests, and the work was well done. Mr. Patterson was greatly pleased with the cordial support he had received from all the local growers and florists. Everybody he said "has gone heart and soul into it and I am proud of them."

The plants and flowers were contributed by the following parties: B. A. Elliott Co. B. L. Elliott, John R. Murdoch, A. M. & J. B. Murdoch, N. Patterson, R. C. Patterson, Ed. Thiel, Ludwig & Richter, A. W. Smith, Jno. Bader, P. S. Randolph, Fred Burki, Wm. Beckert, Duff Bros., and E. C. Ludwig.

The first session was called to order at 2 p. m., the only business transacted being the appointment of a committee to make awards and to make proper disposition of the Chester County Carnation Society's beautiful gold medal, offered for the best new seedling carnation never yet offered for sale, six blooms of a variety to be shown. The gentlemen selected as judges were W. R. Shelmire, C. H. Allen and M. A. Hunt.

The regular session opened at 5:35 p. m. The first business was the reading of the minutes of the previous meeting, the reports of the secretary and treasurer, all of which were accepted as read, and the reading of communications from J. G. Hancock, John Thorpe, R. J. Mendenhall and C. J. Haettel.

The secretary read a letter from the AMERICAN FLORIST calling attention to numerous and widespread complaints regarding the prevalence of carnation rust in shipments of rooted cuttings from various parts of the country.

Thanks were extended to the American Florist Company for permission to use their carnation list and for 1,000 copies of the portrait of President Lonsdale.

Mr. Herr made a report for the Nomenclature Committee giving a list of all new varieties registered with the committee. Mr. Pennock having resigned from the committee, Mr. Herr was authorized as chairman, to enlarge the committee by the addition of four new members.

The committee on exhibition having completed its labors then made its report as follows:

SEEDLINGS IN COMPETITION FOR GOLD MEDAL. While the varieties in competition possess individual merit, it is the judgment of your committee that neither of them embrace enough points of excellence over existing varieties to entitle them to the medal.

STANDARD VARIETIES. Mr. Fred Dorner exhibited a new white variety unnamed, possessing great merit as to form and size, being the best white on exhibition. The length of calyx and the lack of substance in the stem debarred it from receiving the gold medal. Mr. Dorner's exhibit of some of the varieties, including Mrs. Elizabeth Reynolds, William Scott, "The Stuart" Mme. Diaz Albertini, No. 11, Dr. Smart and Richmond, was very fine. Puritan, exhibited by Wood Brothers was very fair. Edna Craig, exhibited by Messrs. Robert Craig and E. G. Hill & Co.; and William Scott, as exhibited by Fred Dorner, were the finest pink varieties on exhibition. Daybreak, as shown by Charles M. Fick, displayed very well the merits of that variety. Henry A. Dreer exhibited a new pink carnation, Madame Rowland, raised by Griffin Bros., which shows some merit, but is not up to the pink carnation of to-day. Essex Heights Floral Company made a creditable exhibit of several varieties including Lizzie McGowan, Puritan, Daybreak, White Dove and a new white seedling. The Chester County Carnation Society made an exhibit of most of the leading varieties in good form, among which were some very fine Buttercup and others from the well known house of the late Charles T. Starr. Mr. W. R. Shelmire had on exhibition some fine specimens of Brutus, Cæsar and Angelus.

SEEDLINGS. A new single specimen flower from E. G. Hill & Co., deserves special mention for size and stiffness of stem, the color being in the order of Garfield. The collection of seedlings exhibited by W. R. Shelmire, the mother parent of all of which was Cæsar, showed a remarkable range of color and form and contained many promising flowers. Henry A. Dreer exhibited a new variety not yet in commerce named Hawaii, white ground, splashed with crimson, showing good form and substance. While not a commercial variety it would be acceptable to the amateur. He also showed a new white named Louis J. Haettel. The seedlings exhibited by Wood Bros., and Mr. Hancock arrived too late to enter into competition with the others.

MISCELLANEOUS. A magnificent vase of Bridesmaid roses was shown by Mr. Frank L. Moore, of Chatham, N. J. Mr.

H. H. Francis of Madison, N. J., exhibited a very fine vase of mignonette. Some fine pots of Cyclamen giganteum were shown by J. M. McCullough's Sons of Cincinnati. Mr. W. R. Shelmire exhibited a new variety of double alyssum which he called "The Giant" on account of its superiority over the common double sort. A new patent wire plant support for carnations was shown by A. W. Smith of Pittsburg. The exhibition room was handsomely decorated with palms by the Pittsburg and Allegheny Gardener's and Florist's Club.

(Signed) W. R. SHELMIRE,
M. A. HUNT,
C. H. ALLEN.

The report of the committee was accepted, and they were further instructed to recommend at a later session such varieties in the exhibition as in their judgment were entitled to a certificate of merit.

The question of the selection of a place to be recommended to the executive committee for next year's meeting, and the nomination of officers to be balloted for on the morrow was then taken up. Mr. Ward nominated New York as the next meeting place. Mr. Messmore nominated Cleveland and Mr. Hill Indianapolis. After considerable good natured discussion, on a vote Indianapolis was selected, it being the prevailing opinion that it would be the wisest course for the society to have a meeting in the west and thus arouse additional interest in that section, in its work.

Nomination of officers being next in order, the following gentlemen were nominated, no opposition in any case being manifested: For president, E. G. Hill, of Richmond, Ind.; vice-president, J. M. Gasser, Cleveland, O.; secretary, C. J. Pennock, and treasurer, C. H. Allen, C. W. Ward, the present incumbent, having declined to serve further.

An informal discussion then followed regarding the desirability of some action on the part of the society towards the prevention or discouragement of the introduction on the market of novelties in seedlings of inferior quality, and the possibility of formulating some plan for getting at the real merits of new introductions. Mr. Hill's views that no seedling should be placed on the market until tested three years by the possessor, and if possible tested in various localities and different soils, also that judges at exhibitions should be selected with greater care, seemed to meet with general approval. In this connection, Mr. Ward stated that the white carnation, Josiah Eaton, Jr., which took the silver cup at the Madison Square show, and which he had become possessor of, had on further trial, gone all to pieces, and would doubtless prove a worthless variety.

The meeting then adjourned till Wednesday morning.

Wednesday morning's session opened with the reading of the essay by Prof. Cowell on "Sports and Variations" which appears in full elsewhere in this issue.

In the discussion following in reply to questions Prof. Cowell said that variations in color often result from a deficiency of coloring pigment, and color can be brought out frequently by use of some acid or soda.

Prof. Bailey believed there was some connection between color in foliage and color in flower, the latter being often modified by variations in color of leaf and stem, instancing zonal geraniums as examples.

Prof. Halsted and others said they had noticed that discoloration caused by bacteria more or less modified the color in the flower.

Mr. Harris told how he obtained the blue color in hydrangeas. He said it was only a temporary effect, due to iron in the soil, and that we cannot get any other color than blue in soil so prepared. Alum in soil also gives a blue color to the flower. It takes two years to get this result from iron filings alone, but by using iron and alum together we can get it in one year.

The committee on awards then reported and recommended that a certificate be awarded to Richmond, Mme. Diaz Albertini and William Scott, shown by Fred Dorner; also to Edna Craig shown by Hill & Co., and Robt. Craig jointly. It was also suggested to the Chester County Carnation Society that it allow all new varieties to compete for the gold medal offered by that society when the variety had been grown three years and not offered for sale more than one year. The committee also recommended the adoption of a scale of points for judging, that varieties should be three years old before being eligible for competition and at least one plant in pot be shown to indicate habit and growth.

Prof. Bailey's paper on "Types and Tendencies" was next in order. This will appear in next week's issue.

In the discussion Mr. Hill told of the strikingly beautiful flowers for exhibition he had seen in England. But these were border pinks, blooming but once, whereas American varieties possess advantage in being continuous bloomers and we now have in recent seedlings raised by Mr. Dorner, flowers equal in beauty to English sorts. He predicted a great future for American varieties in England and urged that we could make decided impression by showing same at Chicago next summer alongside of foreign varieties for comparison. Mr. Thorpe wants plants to be from 4 or 5-inch pots, nicely branched, no small stuff. Mr. Ward told of an application he had made for space at Chicago, and after waiting months, finally got assignment, but size and location were unsatisfactory, and terms impossible of compliance. All the best space had been given to foreign exhibitors, and American exhibitors discriminated against.

[As the above statements reflect rather seriously on the Horticultural Department of the Fair, we interviewed those in charge regarding the matter, and we were permitted to examine the correspondence regarding Mr. Ward's application for space. This correspondence shows that the application was for 100 square feet of space in the open ground, and the full amount of space asked for was awarded, said space being on the Wooded Island, where the majority of the out door exhibits in this department are located. On August 7, 1892, Mr. Ward wrote a letter to the department acknowledging the award of the space for which he had applied, and expressing entire satisfaction with same. We examined this letter carefully and being familiar with Mr. Ward's handwriting, were thoroughly convinced that the letter was penned by that gentleman. We were further advised that no complaint of any kind had ever been received from Mr. Ward. ED.]

Mr. Craig told of the system of growing practiced by Mr. Eisele, of Philadelphia, for out door summer bloom. Cuttings are struck early in October, put in small pots, and a month later shifted to 3-inch, then kept in cold frame all winter, plunged in dry ashes, remaining nearly dormant. They are planted out in April, and give plenty of flowers from July on. He believed in trying to get good fixed varieties of Grenadine type for spring and early summer flowering.

Mr. Ward said the climate of Long Island was the nearest like that of England. Droughts are rare and carnations do splendidly out of doors.

Mr. Anthony said carnations make fine bedding plants in the vicinity of Chicago, and told of methods pursued by growers there similar to those of Mr. Eisele.

Mr. Storm, of Bayside, L. I., said he strikes cuttings late in December, cuts back once, and then again just before planting out in spring, and gets continuous bloom from July on, and was especially successful with Portia.

Mr. Hill said that he saw six acres of blooming carnations at Erfurt, with probably a hundred flowers on each plant. The field could be seen four miles off. This statement excited some laughter.

Mr. Kift suggested the experiment of shipping samples of American carnations to English shows frozen in ice, as had been done with chrysanthemums; and soliciting similar shipments in return.

Mr. Scott referred to remarks in the essay regarding cuttings taken from the base, from off shoots of the flowering stem, and from attenuated flowering shoots, and said he was frightened when he saw dealers offering seventy or eighty thousand rooted cuttings of varieties of which perhaps only one or two thousand plants were in existence. He thought the grower awfully clever to take off so many really good cuttings.

The next essay was upon "The Pot Culture of Carnations," by J. Wm. Colflesh, which in the absence of that gentleman was read by Mr. Craig. Then followed Mr. Cartledge's essay, "A Retailer's Views," read by Mr. Harris. Both these essays will appear in next week's issue.

Following the reading of Mr. Cartledge's paper, there was an animated discussion on the advantages of disbudding.

Mr. Dorner said if we wanted long stems, disbudding was advisable, and also might increase the size of flowers and strength of stem.

Mr. C. H. Allen said he had tested this with McGowan, and the pecuniary results were much in favor of disbudding.

Mr. Harris had tested Buttercups and could not see much increase in size, but he got a stronger and more upright stem, but thought it would benefit flowers, and rubbish would be thrown away.

Mr. Shelmire's experience was that the flower increased in size materially by disbudding. Benefits vary with varieties but as a general thing the increased size was very noticeable. He did not think that disbudding decreases crop of flowers materially. He gets almost as many blooms in the end and escapes loss from customary gluts in January, as best flowers always sell first.

Mr. Ward's experience was similar to that of Mr. Shelmire. He also finds he gets terminal flowers sooner and lateral pips start in and make long stemmed flowers quicker but advised that discretion be used according to growth and habit of varieties.

Mr. Gasser, speaking from the retailer's standpoint, finds customers prefer a single bloom on long, stiff stem, without buds, and don't want a stem with two or several blooms.

Mr. Kift agreed and thought the center

flower liable to close up quicker if buds were left on.

Mr. Anthony differed from Mr. Gasser. He finds his customers regard several flowers and buds on a stem as more graceful and such sell better. The forenoon session then adjourned at 12:30.

The afternoon session opened with the reading by the secretary of Mr. Sewall Fisher's essay on growing new varieties of carnations, which appears elsewhere in this issue. Then followed the paper on carnation diseases by Prof. Halsted which is given in full on another page. The paper was illustrated by means of charts and diagrams suspended on the walls, to which the Professor made frequent reference. Prof. Atkinson's paper on carnation diseases was then read by Prof. Bailey, the essayist not not being present. This essay, freely illustrated, is also given in full in this number. The next essay was by Mr. Ward, on carnation enemies, the major part of same will be given in another issue. In connection with his essay Mr. Ward showed samples of rooted cuttings illustrating methods of propagation, also sample plants infested with various fungous diseases.

In the discussion Mr. Shelmire urged that while taking all possible precautions to prevent dissemination of diseases we should always remember that even healthy cuttings cannot be depended upon to remain free from rust, as spores may be carried by the wind. Prof. Halsted said the spores are very fine and light, and there is no reason to suppose they cannot be carried as far as the wind can go, and added that spores perform the same functions as seeds in higher organisms and under favorable conditions may no doubt retain life for years. Also that one of the best ways to breed disease is to grow the same kind of crop several successive years on the same area. All we can do is to prevent the germination of spores on portions of plants. If a healthy plant is sprayed so as to be coated with fungicide fungi cannot grow there, but when the fungus is once in the plant nothing can reach it.

Mr. Gasser remarked that only certain varieties seem liable to infection with him. Mr. Hill had had similar experience, and thought we may be driven to the production of such varieties as will enable us to dispense with those over susceptible from thinness of skin or other reasons. Prof. Bailey advanced the opinion that some times the failure of flowers to open is owing to some disease of the the plant—something that cuts off supply of nutriment from below. Mr. Ladley said, judging from the enormous over production of blooms this season there was reason to believe that rust had not yet become a very serious matter, although it might become so in future and it is well to begin in time to control it.

The election of officers then took place and all the nominees were unanimously elected. E. J. Van Reyper was chosen vice-president for middle states, and Fred Dorner for western states.

Resolutions were introduced to change the constitution by inserting words "and Canada" in preamble and changing date of annual meeting from third Tuesday to third Thursday in February, as third Tuesday is election day in Pennsylvania and some members wish to vote.

Mr. Ladley announced that the Chester County Carnation Society's medal still remains offered. He wants to see somebody win it, and that the Chester County Society has plenty of money to buy another.

Votes of thanks were passed to the essayists, local club and Pittsburg Press.

Professors Halsted and Atkinson were elected honorary members. A vote of thanks passed to retiring president Lonsdale expressed much appreciation of his services and efforts in the society's interest since its organization.

The society then adjourned at 5:30 p. m.

At a meeting of the executive committee, C. H. Allen was selected to read a paper on carnations, at St. Louis in August, in accordance with request of executive committee of the national society, and the secretary was instructed to present at the same time a summary of the doings of the Carnation Society to date.

The society having been invited to a banquet given in their honor by the Pittsburg and Allegheny Florists' and Gardeners' Club, proceeded accordingly to the banquet hall at 8:30 p. m. The decorations of the hall and tables were superb and most artistic. The hall was very spacious, and was liberally decorated with fine plants of excellent quality. On the tables were over twenty handsome baskets and vases of flowers, each one different and all artistic and unique. This feature was a surprise even to those who expected something fine, and the Pittsburg brethren can claim truthfully that no finer display has ever been made in the country under similar circumstances.

After the good things on the tables had been disposed of, President Reineman of the local club set the ball in motion by a few words of cordial welcome, and introduced Mr. Robt. C. Patterson as toast master, who got a great reception. After adding a word of welcome he proceeded to read letters regretting inability to be present from Messrs. John Thorpe, J. M. Dunlop, J. C. Vaughan, D. D. L. Farson, W. F. Dreer, C. D. Ball, C. F. Evans and others.

He then introduced W. C. Moreland as one of the most magnificent talkers on earth. Mr. Moreland offered hearty welcome to Pittsburg, saying florists were building up in all this broad country a refined taste which those who went before us knew nothing about. "The American Carnation Society" was responded to by President Lonsdale, who extended hearty thanks for the great welcome. Mr. Craig followed, saying he had enjoyed himself as s ldom done before, and was glad to testify appreciation of unstinted hospi ality, and congratulated Pittsburg florists on their fraternal spirit, evidences of which were seen on every hand. W. D. Moore, of Pittsburg, spoke eloquently on flowers and their relation to mankind, dwelling particularly upon the association of flowers with the highest and noblest aspirations of humanity, and was glad to recognize the great æsthetic work florists had done for Pittsburg.

Mr. Hill applauded Pittsburg's progress, and was glad to see that Pittsburg florists stand in the front rank. Mr. Harris told of how he obtained a map of Pittsburg, and as usual brought down the house before he got through. Mr. Dorner was introduced as prince of carnation growers from the Hoosier state. He tendered an invitation to all to be in Indianapolis next year. Mr. Alex. Burns was received with a great hurrah. Mr. Hamilton complimented the carnation growers on being a lot of enthusiasts, as nothing had ever been accomplished in this world without enthusiasts. Mr. P. S. Randolph predicted great accomplishments by carnation growers in the next ten years, and was only sorry that florists did not band together ten or fifteen years sooner in that great national society to which we owe all our wonderful advancement. Mr. Alex. Wallace rendered a beautiful song, "I love the lassies, bless them all," with fine effect. Mr. Lonsdale reluctantly consented to sing the stirring song, the "Brave Old Duke," remarking beforehand that he did not believe in introducing any element of levity into the proceedings, and felt much embarrassed. But his mock solemnity was soon overcome by the merry crowd in his neighborhood, and when he concluded, tears of laughter were running down his cheeks. Much merriment was also created by the toastmaster's efforts to maintain order and decorum. Remarks were also made by Messrs. Long, Shelmire, Pennock, Ladley, Stewart, Kift, Beatty, Hunt, Allen, Beckert, Siebert, Nat. Patterson, Duff, B. L. Elliott, Watson, Ludwig, Burki, Dalmeyer, and A. C. Walker, World's Fair Commissioner for Penn. Horticultural Department. The party broke up at 1 a. m. singing Auld Lang Syne.

Buffalo.

The season of gaiety closed with a little rush of social events, but not to any great extent, and now Lent is here we expect to be rather quiet. We must, however, not complain, for since the first of last October there has been up to date a great increase over former years in society events, which has been a help to the florists. Roses have been very scarce for the past two weeks and commanded a good price. Carnations of all colors have been none too plentiful. Violets although plentiful have all found a market. There would be a brisk sale of plants if weather permitted it, but with the exception of a day or two occasionally our terrible winter holds its sway and at this writing a blizzard of the first quality is raging round us. Yet I suppose we are as well off as other northern towns except on one very important point. I think we get less sunshine during the winter months than almost any other city.

At the last meeting of our club nominations of officers for the coming year was in order. The leading spirits of the club are all nominated and a very lively campaign is looked for. The election of officers does not take place till the first meeting in March, so there is plenty of time for electioneering. Our able secretary (E. I. Mepsted) being absent on account of the serious sickness of his wife, and the minutes being written in Chinese characters, the reading of same was deferred until a future meeting.

The president, Mr. Cowell, complying with a previous request of the members, read a list of the best 24 commercial chrysanthemums, omitting of course introductions of this year. Here it is:

WHITES: Ivory, M. Wanamaker, Mrs. M. J. Thomas, Frank Thompson, Mrs. R. Craig, Domination.

PINK: Mermaid, Viviand-Morel, Ed. Hatch, H. F. Spaulding, Ada Spaulding, Excellent.

YELLOW: W. H. Lincoln, L. C. Madeira, Emma Hitzeroth, Mrs. Libbie Allen.

BRONZE: Harry May, Hicks Arnold, Col. Wm. B. Smith.

RED: John Thorpe, Cullingfordii, G. W. Childs, Mrs. Heazlett, Elmer D. Smith.

WHEN writing our advertisers please use one of your printed business letter heads or enclose your business card.

Carnation Diseases.

BY GEO. F. ATKINSON, BOTANICAL DEPARTMENT, CORNELL UNIVERSITY.

[*Read before the American Carnation Society at Pittsburg, Pa., February 22, 1893.*]

The variation of plants under cultivation has been studied chiefly in reference to the changes of external form, color, the gross anatomy of certain organs, fertility or sterility and productiveness. Very little study has been directed toward determining the corresponding or correlative variation in the minute anatomy, and the physiological processes of nutrition, circulation and assimilation.

Breeders of animals have given more attention to the law of correlation than have cultivators of plants. *Sana flora in sana planta* might well be the maxim of the florist. A great deal is said about constitutional peculiarities possessed by certain varieties of plants, but very few know how the different constitutional strains are related to the structural and morphological characters of the variety, or to the conditions of soil, surroundings or treatment during the time of origination, or to those more subtle influences of change of an inherited or inherent nature.

Nearly all our attention is given to producing new colors and forms of flowers and new habits of the plant, while very little thought is given to a harmonious development of physiological process and firmness of tissue.

This accounts to a large extent for the many varieties of plants which are more susceptible to fungous diseases than are other varieties. Ward* has shown that the succulent parts of plants with thin walled cells are more quickly and easily penetrated by the threads of parasitic fungi, and that this is one reason why during rainy periods fungus troubles are more prevalent.

Fig. 1. Carnation rust on leaf and flower stem. From photograph.

The following descriptions of some carnation diseases is given in the hope that a knowledge of the habits of the fungi, their structural peculiarities and modes of propagation may contribute toward this end.

CARNATION RUST.

(*Uromyces caryophillinus* Schrank; Schrœter.)

The first occurrence of this European importation in the United States was announced by Dr. J. C. Arthur‡.

Dr. B. D. Halsted† describes the appearance of the rust on the stems and leaves and notes its occurrence and harmfulness in various parts of the east. It is generally considered to be one of the most injurious of the carnation troubles, and is regarded by some as impossible to cure when once it has secured a hold upon a plant.

The first outward sign of the presence of the fungus in a plant is indicated by a slight swelling on the leaf or stem, one eighth to one fourth of an inch long and nearly as broad. The surface of this swelling soon becomes pale or nearly colorless, since the green coloring matter at that point is destroyed and obscured by the presence of the crowded fruiting threads and young spores of the fungus. As the fungus matures these spores or reproductive bodies become brownish in color. The great mass of these spores lying so closely together imparts a dark brown color to the colony of fruit or sorus. By pressure from the growth within the epidermis is ruptured and turned to one side, where it usually clings as a whitish, ragged looking film by the side of the now exposed mass of spores.

Figure 1 from a photograph shows two of these sori, one on a leaf and another on a flower stem.

If one makes a thin section of such a leaf or stem and examines it under the microscope it can be readily seen why the parasite does such injury, and also why it would be impossible to heal the affected plant by any external applications of a remedial agent. The spaces between cells of the leaf or stem are closely packed with the threads of the fungus, which are curved and interwoven into labyrinthian meshes, reminding one forcibly of the whitish mass of roots of some potted plant as they lie between the soil and pot.

Figure 2 is from a camera lucida drawing of such a section through an affected leaf.

Long before there is any external evidence of the disease these vegetive threads of the fungus are growing and extending themselves between the cells of their host. After a while they converge toward certain centers below the epidermis, where

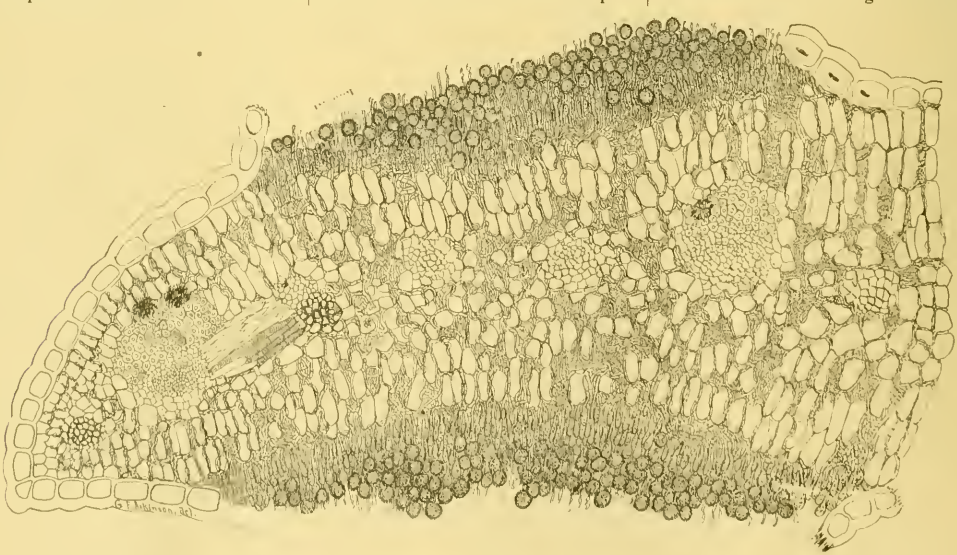


Fig. 2. Section through a rusted leaf at a sorus, showing intercellular mycelium of the rust and the uredospores. The scale shown above the figure is a millimeter somewhat magnified. The object is magnified 20 times more than the scale.

Care in the development of hardy varieties, attention to hygienic surroundings and the certainty of sound cuttings from sound individuals will do much to alleviate the sufferings of the carnation grower, and add to the beauty of his house.

*Ward H. Marshall, Croonian Lecture.
‡Botanical Gazette, November, 1891.
†N. J. Agri. Coll. Exp. Sta. Report, p. 301, 1891.

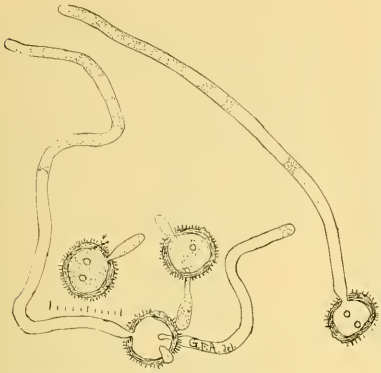


Fig. 3. Uredospores, more highly magnified, germinating.

they grow very closely together, parallel to each other and perpendicular to the surface of the leaf. This constitutes what is termed the *stroma*. These parallel threads continue to elongate, at the same time broadening at their free ends until a rounded or oval body is developed which becomes light brown in color.

Fig. 4. Several teleutospores, showing the variations in form.

The color resides in a thick wall, which surrounds and protects the delicate living protoplasm within and is covered with numerous minute spines, and is said to be *echinulate*. These constitute the first form of reproductive bodies and are termed *uredospores*.

Fig. 5. Group of basidia from the young stroma, just prior to the formation of uredospores.

The uredospores will germinate in the presence of water as soon as they are set free. In handling rusted plants these spores easily rub off, appearing as a brown powder. Since they are easily scattered about over other plants they are liable to germinate where there is sufficient moisture and infect them. In germinating the protoplasm inside the stout wall pushes its way out through one of the three pores always present in the wall. Sometimes the protoplasm starts to push out at all three of the pores but soon ceases to extend in all but one, where it passes out into a long thread which eventually enters the plant again if the uredospore is properly located.

A short time after the development of the uredospores the stroma of the same sorus, especially on the stem, produces a second kind of spore, termed a *teleutospore*. These are also one-celled bodies and possess a stout brown wall, the wall, however, is smooth; at the apex there is usually a minute projection, or *spiculus*, of a lighter color, while at the base a fragment of the long pedicel remains attached after the teleutospore becomes free.

The teleutospores will not germinate immediately after they are developed. Like the teleutospore of many other *uredineæ* they probably must first pass through a period of rest. Thus they serve as resting bodies to tide the parasite over an unfavorable period when the uredospores or the vegetive threads are liable to perish.

While the vegetive threads, or mycelium, of the rust course almost exclusively between the cells of the host they of course derive their nourishment from the protoplasm within the cells, thus bringing about the great injury to the carnation plant. The means by which they extract their nutriment from the interior of the cells while they are lying on the exterior is easily seen by making a section across the stem of an affected carnation. The threads lying in the intercellular spaces send out very slender branches, which eat their way through the cell wall and then become swollen into rounded or lobulated sucking organs or *haustoria*. Ward* describes similar haustoria of *Hemeleia vastatrix*, the cause of a uredinous coffee tree disease.

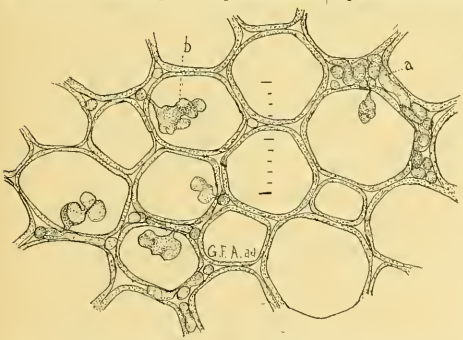


Fig. 6. Cells from the stem of a rusted carnation showing the intercellular mycelium and haustoria. Object magnified 30 times more than the scale.

Figure 6 is from a camera lucida drawing showing the haustoria of *Uromyces caryophyllinus* in the cells of a carnation stem.

The rust attacks the carnation at all stages of its growth, not sparing the young cuttings, where I have observed it in company with the anthracnose. The cuttings were probably made from a rusted plant which showed no external evidence of the presence of the parasite, but contained the threads within the tissues. Probably the best treatment would be to destroy all affected plants, and where possible to remove all soil and disinfect the surroundings. If it is desirable to try cuttings from any affected or suspicious plant, the cuttings should be quarantined for at least one season to be sure no disease is lurking in the tissues.

Fig. 7. Spot (Septoria) on leaves. From a photograph.

Fig. 8. Spot (Septoria) on the stem and leaves.

"SPOT" OF CARNATIONS OR "BLIGHT."

(*Septoria Dianthi* Desm.)

The so-called "spot" of carnations is very widely distributed, and probably the cause of more trouble than is generally admitted. Like the rust it has been long known in Europe and has been several times mentioned in this country. The dis-

*Journal of Botany, Vol. XIX, Quarterly Journal, Micros. Science, N. S., Vol. XXII.

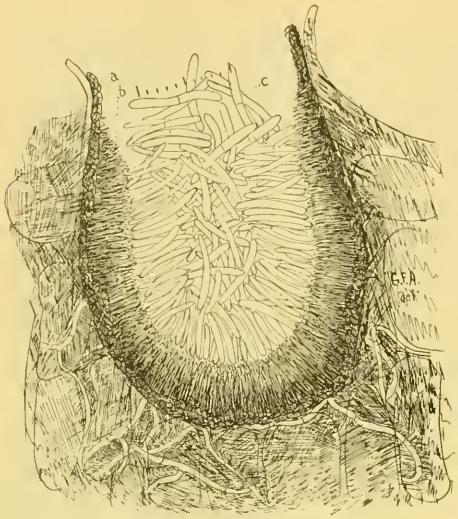


Fig. 9. Septoria, section through one of the conceptacles. Magnified 30 times more than the scale.

ease possesses certain characters which enable one to distinguish it quite easily from other leaf troubles of the carnation, but when it attacks the stem it is apt not only to produce injury which to most observers might seem greater than the external evidence would indicate, but also to induce secondary disturbances which result in killing the plant or preventing the full opening of the flowers. Figures 7 and 8 represent respectively a pen drawing and photograph of the spots on the stem and leaves. The spot is usually characterised by a nearly circular or oblong dirty white or brownish center bordered by a dark band purplish in color. This band is well defined on its inner edge where it joins the center but is usually illdefined and diffused with the green of the leaf on its outer edge. The whitish center of the spot is dotted here and there with minute black points, which are portions of the fruiting conceptacles projecting through the epidermis to the outer surface. Frequently the spot is on the margin of the leaf, when it is semicircular in form. Occasionally the spot possesses all the characters of the center, but lacks the dark border. Where the injury extends across a large part of the leaf the outer portion of the leaf dies. On the stem the spot appears as an oblong patch on one side, the border usually not so well marked as on the leaf.

The injury to the stem is more serious, since it may extend so far internally as to cut off the supply of nutriment from the upper part of the plant, and also start a diseased condition of the stem which may be taken advantage of by other fungi or bacteria to extend the injury down into the stool and thus endanger the health and life of the entire plant. Figure 11 is from a photograph of a plant the young flower stems of which were killed by the *Septoria*.

The vegetive condition of this *Septoria* is, like the rust, a mycelium consisting of

Fig. 10. Septoria Spores.

slender fungus threads, which however differ very much from those of the rust. The threads are more slender, are less frequently septate, and do not develop haustoria. Consequently, in order to obtain nutriment from the protoplasm of their host they must themselves penetrate the cell walls and pass through the cell. This is in fact the case.

The fruiting condition of the *Septoria* is also very different from that of the rust. After having consumed the greater part of the nutriment at the affected spot the threads at certain centers in the diseased area develop into a black oval hollow body, or conceptacle, the open end of which projects slightly above or below the surface of the leaf. A section through one of these conceptacles is shown in figure 9. From the inner face of this conceptacle short slender fruiting threads, or *basidia*, are developed which all point towards the center. These basidia bear at their free ends the oblong, curved, colorless, one to three septate, spores. When this gelatinous mass absorbs water the

Fig. 11. Flower stems killed by Septoria. From a photograph.

Fig. 12. Anthracnose (Volutella) on leaf sheaths. From a pen drawing.

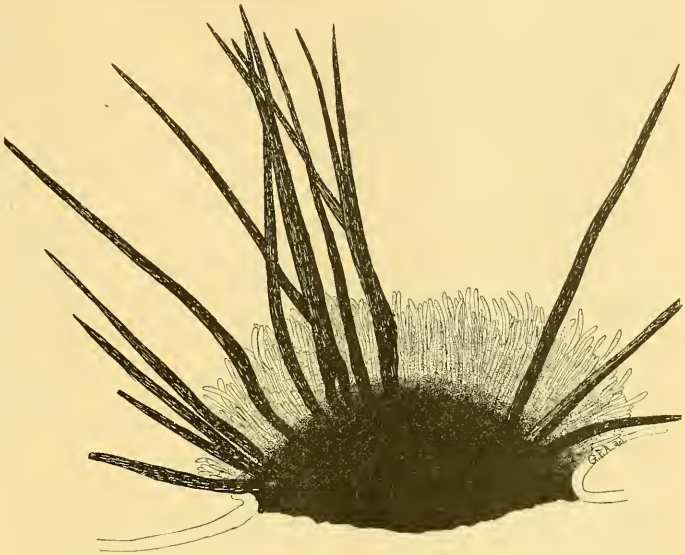


Fig. 13. Volutella, a fruiting stool showing setæ and stroma. Magnified 30 times more than the scale.

spores are expressed in great numbers out at the opening of the conceptacle, ready to be washed about upon other plants and spread the infection.

ANTHRACNOSE OF CARNATIONS.

(*Volutella* sp.)

This disease also seems to be very widely distributed in this country, and for the cutting bed at least is one of the most serious enemies of the "divine flower." It appears to be a rather recently observed trouble, and consequently has not been studied heretofore with any degree of seriousness. It has been doubtfully referred to the genus *Colletotrichum** and probably for this reason has been termed "anthracnose."

Figure 12 is from a pen drawing of a portion of a mature plant affected with this fungus. The black bristly points represent the elevated fruit clusters or stools. Figure 13 represents a lateral view of one of these stools quite highly magnified.

Affected cuttings show dirty brown depressed areas of diseased tissue, presenting these same small black fruit stools. These depressed, or shrunken areas of tissue are caused by growth of the fungus threads in the cutting at that point. The fungus also extends into the leaf sheaths and bases o the leaves, as it will sometimes the entire length of the leaf. The leaf frequently however is killed by the fungus attack at its base, before the growth develops in the lamina of the leaf to any extent. This fungus, as well as the *Septoria*, by its growth in the stems of matured plants probably interferes greatly with the successful opening of the flowers. Appropriating nutriment from the stem for its own use it interferes with the nutrition of the upper parts of the plant, as seen from the frequent shriveling of the stems and pale, irregular, small depressed areas both on the upper leaves and stem, which show no sign of fungus growth at those places. Since all plants which I have seen affected in this manner figure 13, beside the spore bearing stroma there are numerous long black or dark brown bristles, or *setæ*, which are obscurely and remotely septate.

A section through one of these stools showed the presence of *Septoria* as well as of anthracnose I have been somewhat in doubt which of the two is the more directly responsible for this interference with the nutrition of the stems as described above.

In the fruit stools as represented in shows that the spore bearing threads or basidia, have a common origin with the setæ at the base of the stroma quite early

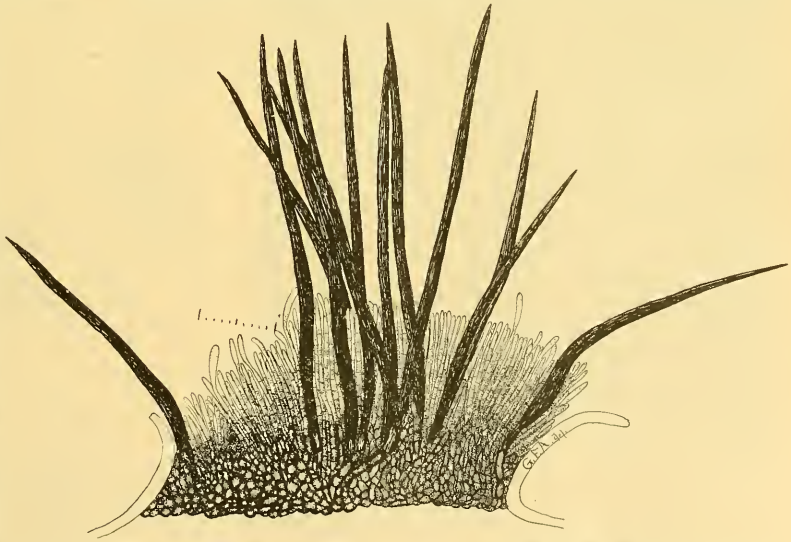


Fig. 14. Volutella, section of a fruiting stool. Magnified 30 times more than the scale.

*Report N. J. Agr. Coll. Exp. station, 1891. p. 301

in its development. The cells of the stroma anastomose and form a false cellular mass which soon becomes quite dark, or nearly black in color, as shown in figure 14. The free ends of the basidia are separate, but they lie packed closely parallel, their ends so situated as to form a nearly even, slightly convex surface. When quite old even the ends of the basidia are dark in

Fig. 15. Volutella, spores germinating. Magnified 30 times more than the scale. From culture in agar.

color. The spores are borne at the ends of the basidia. Some not yet mature are shown in figures 13 and 14.

In order to study carefully the development of the fungus so that its relationships might be more apparent a pure culture was obtained, using the dilution method in nutrient agar—agar, pouring the dilutions into Petrie dishes. By placing the dishes under the microscope from time to time the germination of the spores and development of the mycelium could be easily studied.

The spores are curved, fusoid, hyaline, coarsely granular and usually with a single vacuole or clear space in the center, which sometimes gives them the appearance of being once septate. By the time of germination they become once septate. The protoplasm pushes out at one or more places, causing the very thin wall of the spore to protrude at the point of pressure. This protrusion now elongates into a fungus thread very nearly, or quite the same diameter as the spore. The protoplasm gradually passes out into the forming fungus thread, and additional protoplasm is made by the assimilation of some of the nutrient agar which the thread absorbs. That the germinating spore is septate can easily be determined where the germ tubes arise from only one-half of the spore. In such cases the protoplasm does not disappear from the other half. As the coarse granules of protoplasm pass out into the young thread they are gradually dissolved. The fungus threads are divided by cross walls into cells two to four times longer than their diameter. They also branch freely so that soon a weft of mycelium is formed, the threads of which radiate in all directions from the center of growth. Figures 15 and 16 represent spores in all stages of germination. In about two days new spores are formed. Figure 17 represents some of these formed at the ends of some of the branches. In the agar cultures the fruiting threads are frequently somewhat inflated and curved or hooked near their free ends. Several spores are borne in succession from the ends. Frequently the fruiting threads branch several times near their ends, and the spore production is much like that in *Fusarium*.

Fig. 16. Volutella, spores some time after germination. Magnified 30 times more than the scale. From culture in agar.

Fig. 17. Volutella, branches of the mycelium bearing spores. Magnified 30 times more than the scale. From culture in agar.

When transplantings of the spores are made into a culture tube of agar the threads grow out in a radiating fashion through the upper surface of the medium, and in a few days at the point of inoculation there is developed a pink pigment which gradually extends out over the entire surface of growth, as the spores are produced upon those parts of the mycelium. The pink color gradually acquires a distinct violet tinge, which is heightened near the point of inocula-

Fig. 18. Volutella, fruit stool from culture on sterilized bean stems. Magnified 30 times more than the scale.

tion by the darkening of the mycelium where scleroted masses are developed, resembling the stroma of the fruiting stools. The darkening of the mycelium also appears in radiating lines from the point of inoculation. This is beautifully shown in culture tubes on oblique agar.

Fig. 19. Volutella, spores from culture on bean stem. Magnified 30 times more than the scale.

On sterilized bean stems the fungus grows vigorously, spores of variable size are developed in great numbers, as shown in figure 19, while numbers of normal ones are also developed. Because of the difference in the texture of the substratum the blackening of the mycelium appears much earlier than in agar culture, and fruiting stools in all respects similar to those in nature are developed, but of a little more delicate habit, the setæ perhaps not so stout and dark, the basidia longer and more slender, and profusely anastomosing quite near their free ends, as shown in fig. 18.

Fig. 20. Volutella, ends of certain mycelial threads from agar culture. Magnified 30 times more than the scale.

In old cultures in agar free ends of some of the threads become variously enlarged and much lobulated, as shown in figure 20, and in age these become dark colored. The mycelium in agar cultures presents two conditions, a normal condition rather finely granular and richly vacuolate, and an abnormal condition, the threads much greater in diameter, the protoplasm coarsely granular, and the walls of the cells frequently rupture without external disturbance, when the protoplasm escapes in clouds. This study of the structure and development of the carnation anthracnose reveals a plant quite distinct morphologically from *Colletotrichum*, or indeed from any member of the group to which the common name anthracnose is usually applied. The stroma is not formed in a true pustule, as is the case with the *Melanconineæ* to which *Colletotrichum* belongs.* It is formed into a compact stool or tuft, and elevated a considerable distance above the substratum, and consequently occupies an intermediate position between this group and the more clearly recognized *Hyphomycetis*. It is therefore properly referable to the *Tuberculariea*,† and a member of the genus *Volutella*, agreeing with what is recognized by Saccardo, as the subgenus *Psilonia*.

CARNATION ROSETTE.

Carnations of several different varieties have come under my notice which presented the appearance of a *rosette*, the stem very little elongated, the leaves also quite short and crowded or rosetted upon the stem. Figure 21 is from a photograph of a rosetted carnation. Evidently some disturbance interfered with the interstitial growth of the stem. Sections of the stem, presented here and there discolored spots in the medulla or pith, through the cells of which fungus threads ramified in all directions. Cultures from the medulla of such plants in nearly all cases, produced a species of *Fusarium*, but in some cases bacteria. The parenchyma in many cases, in the medulla, had become corky. One or the other of these organisms probably was responsible for this pathological condition, but without careful inoculations and a comparative study of the results no decision can be reached. When the plant dies, which it proceeds to do without flowering, the fungus in the medulla combines the force of its growth into an anostomosing weft in the form of a wedge, with the point directed outward, and literally wedges its way out. First through the woody ring, next a broad band of sclerenchymatous tissue, a band of parenchyma and the epidermis to the outside where it expands into a fruiting stool the basidia of which bear numerous long, curved, fusoid, 3 to 7 septate spores, as shown in Figure 22. Figure 23 *a* represents some of the spores more highly magnified. Figure 23 *b* spores germinating. In germinating each ce of the spore except the end one can develop a germ tube. Before germination, however, each cell swells into nearly a spherical form.

Fig. 21. Rosette. From a photograph.

It may be that in the cutting bed the cut end of the stem does not heal properly, or so slowly that the exposed medulla partially decomposes, thus affording a nidus for the *Fusarium*, or bacteria, and when the cut is healed externally these organisms are imprisoned in the

*Saccardo, Sylloge Fungorum, Vol. III.
†Ibid, Sylloge Fungorum, Vol. IV.

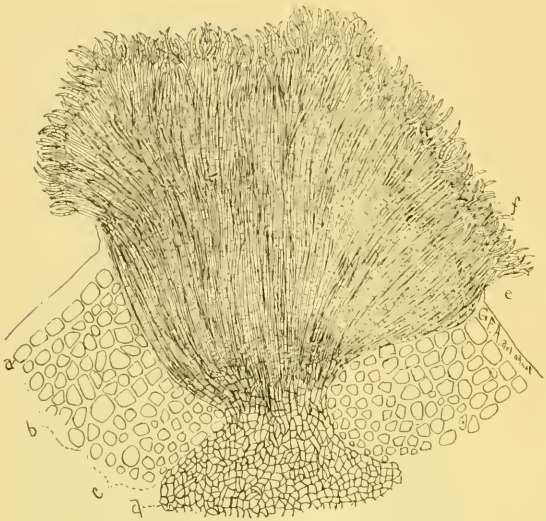


Fig. 22. Fusarium, fruiting stool from stem of rosetted plant.

pith. Their presence and the partially decayed tissue would affect the adjoining tissue, and gradually more and more of the pith would be laid under contribution to the organism.

"RUNNING OUT."

It is said of many varieties of carnations that they "run out." The remarks here apply only to some varieties which have come to my notice as having this tendency. Upon examining quite a number of plants, among them such varieties as Buttercup, old DeGraw, L. L. Lamborn, etc., I found the pith or medulla affected much in the same way as in the case of the rosette, except that I did not note any change of the parenchyma to corky tissue. Cultures from the pith produced a Fusarium, and occasionally bacteria. Cuttings from such plants might frequently be made, which would contain in the pith this organism. All the plants of a single variety in the hands of a grower might be affected in this way because the parent stock was diseased and the trouble handed down from one generation to another until the plant is literally run out by the imprisoned parasite.

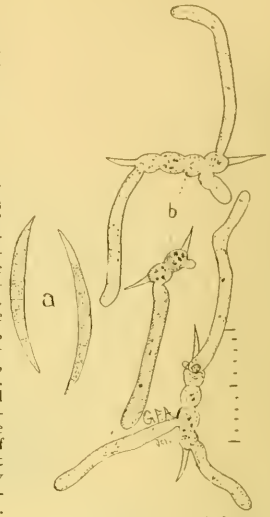


Fig. 23. Fusarium spores, *a*, before germinating, *b*, germinating; magnified 30 times more than the scale. From agar culture.

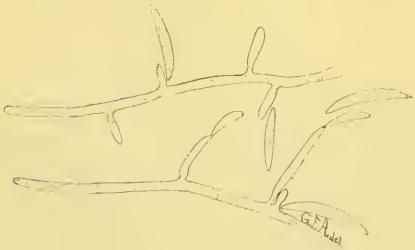


Fig. 24 Fusarium, threads in agar culture bearing spores.

In making cuttings from plants, if there is too much moisture in the house or the conditions are otherwise unfavorable, the scar may not properly heal and would thus afford an entrance to similar germs.

The injuries produced by the *Septoria* on the stem afford similar vulnerable points.

These suggestions can probably be turned to good account by careful attention on the part of the growers.

FAIRY RING SPOT OF CARNATIONS.

(*Heterosporium echinulatum* (Berk.) Cooke).

Carnation leaves diseased by this fungus were sent through the kindness of Dr. B. D. Halsted. This seems to be a recent importation from Europe, since only recently complaint has been entered against it in this country, while it has been known for nearly a quarter of a century in England.

Fig. 25. Flower buds, failing to open properly. From a photograph

Fig. 26. Heterosporium echinulatum (Berk.) Cooke. Tuft of fruiting threads, magnified 30 times more than the scale.

Fig. 27. H. echinulatum, spores. Magnified 30 times more than the scale.

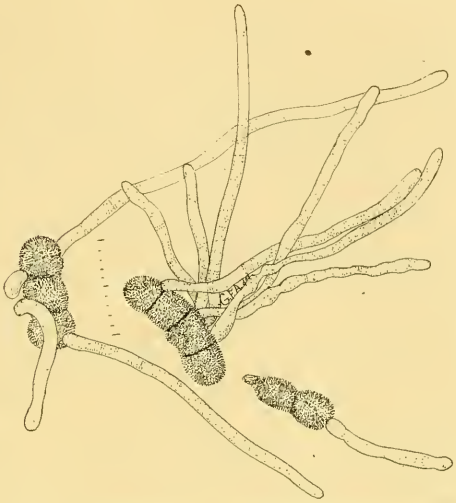


Fig. 28. H. echinulatum, spores germinating. Magnified 30 times more than the scale.

Fig. 29. H. echinulatum, from Roumeguere Fungi Gallici No. 1080. Magnified 30 times more than the scale. From a species of Iris.

Fig. 30. H. Dianthi, S. & R. (A synonym of H. echinulatum), Roumeguere Fungi Gallici No. 1431. Magnified 30 times more than the scale.

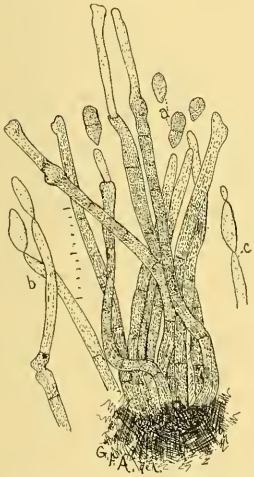


Fig. 31. Cladosporium herbarum var. nodosum. Tuft of fruiting threads and spores. Magnified 30 times more than the scale.

Fig. 32. Botrytis. From pen drawing.

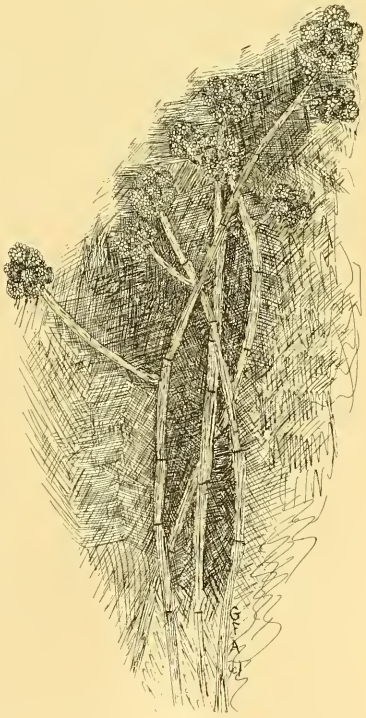


Fig. 33. A bouquet of Botrytis.

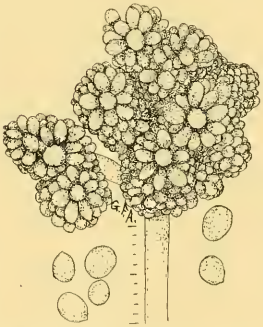


Fig. 34. Botrys. Detail drawing showing fruiting head and spores. Magnified 30 times more than the scale.

As the vegetive threads growing within the leaf tissue exhaust its substance at certain points there appears a nearly circular light colored spot. In these spots directly beneath the epidermis the threads form small tubercular bodies, dark brown in color. Great numbers of these are developed in a single spot. From these the dark brown fruiting threads arise, push out through the epidermis and bear spores at their tips. These fruiting threads arise singly or in loose clusters of two to six or more. A fruiting thread, after it has produced one spore, grows out again, usually a little at one side of the end, where the spore was freed and produces another spore, and so on. This plan of spore production gives to the threads a crooked or irregularly geniculate appearance, the angles appearing more or less knotty or enlarged. The fruiting threads are also distinctly septate. Figure 26 represents a cluster of

the fruiting threads. Some of the spores are represented in figure 27. The spores are variable in size and form, being generally oblong, sometimes clavate and frequently a small projection at the base or point of attachment with the fruiting thread. When the spore is clavate, the smaller end is the point of attachment. The spores literally bristle all over with minute spines and are usually two to four-septate, quite prominently constricted at the septa. The smaller spores are sometimes one-septate or even continuous and rarely the longer ones are five-septate. The spores are also brown in color and when produced in great numbers together with the threads darken the spot. The spot then possesses different shades of color, according to the number of spores produced. The growth of the fungus from the center of the spot is centrifugal and the dark color is apt to be arranged in concentric lines or rings, representing a miniature fairy ring, as W. G. Smith* has suggested.

This fungus was first described on carnations 23 years ago by Rev. M. J. Berkeley† and is therefore a true carnation pest. He writes of it as follows: "Many curious matters have turned up from time to time from the queries of correspondents and not the least curious is the parasite which lately has been sent us on the leaves of a carnation, to which it appears to be doing considerable damage. The leaves are studded with large round white spots, on which a brown mould is developed, arranged in little concentric tufts. The threads are extremely irregular, forming little fascicles, slightly branched, the branches often assuming the form of knots, and the upper knots in some cases bearing the spores, while occasionally, as in our figure, they occupy the colorless upper portion of the threads. The spores themselves are cylindrical, with from two to four articulations, slightly constricted occasionally at the dissepiments and beautifully echinulate, a character which we do not recollect to have seen before in the genus to which it belongs, the spores being considerable in length according to the number of dissepiments.....

"The species is quite new and may be characterized, *Helminthosporium echinulatum;* floccis fasciculatis, irregularibus nodosis, sporis hyalinis cylindricis, 2-4 septatis echinulatis."

Three years later, probably having forgotten his first description, Mr. Berkeley describes the fungus again on Dianthus as *Helminthosporium exasperatum*‖.

In 1886 W. G. Smith§ having received it on carnations from a correspondent, recognized it as Mr. Berkeley's *Helminthosporium echinulatum*. He calls attention to the fact that Berkeley described it later as *H. exasperatum*, says it is not distinct from *H. variabile* and sometimes occurs on *Ornithogalum*, when it is termed *H. Ornithogali*. W. G. Smith takes occasion, and justly so, to deprecate this confusion of names, but two years later he speaks of it as *Cladosporium echinulatum*".

Saccordo and Roumeguere described it as *Heterosporium Dianthi*¶, while Cooke¶ properly locates it as *Heterosporium echinulatum* (Berk.).

BOTRYTIS DISEASE.

When the soil and especially the air in the house is kept quite damp carnations are sometimes subject to the depredations of a Botrytis. Figure 32 represents an attack of Botrytis on the flower buds. The details of the fungus are shown in figures 33 and 34.

CLADOSPORIUM.

Similarly a species of *Cladosporium*, probably *C. herbarum* var. *nodosum* Berk. shown in figure 31, attacks weak plants where the conditions of culture are not very good.

PURPLE JOINT.

This is said to be a bacterial disease, but since Dr. J. C. Arthur has recently completed quite an extended study of it the writer has given it no serious attention.

Growing New Varieties of Carnations.

BY SEWALL FISHER, FRAMINGHAM, MASS.

[*Read before the American Carnation Society at the Pittsburg meeting.*]

What I have to say must of necessity be from my own experience which, though extending over about fifteen years, has been in a very moderate way, and without sufficient accuracy to be of much value scientifically. More time, greater care to prevent the mingling of pollen, and more accurate records of varieties used and results obtained, are requisite in order to fix the laws governing the production of new varieties of carnations from seed. This seems to belong to the Experiment Stations connected with the State Agricultural Colleges.

My object has been to secure an improvement in varieties useful to the commercial florist, rather than those which, like the Marguerite, are valuable to the seedsman; varieties imperfect from the botanist's standpoint, because the flowers lack more or less the seed producing organs, but are thereby rendered more lasting.

What led me into it was the tendency of the good old La Purite to die off in winter. "We need a new one of the same color," said a prominent florist to me. Not knowing where to obtain seed I began in a small way by the purchase of one packet of imported seed for which fifty cents was paid. It contained seven seeds, and nothing came of it worth preserving. I then began growing my own seed, and from a pod of Degraw grew in 1877 four good varieties, one of which, a fine white, was called Sea-foam, and a variegated white and pink was named Fascination. Encouraged by this success I began crossing different varieties with much enthusiasm. If the second year's experience had been as futile as the first in all probability that would have ended my efforts. The varieties mentioned began to attract the attention of florists, which led me to study more carefully the conditions of seed production, and to read with interest everything within my reach, on the subject.

The next year gave me Fisher's Early White and Cardinal; the first a very prolific, early white having stiffer stems than Degraw; the other a large, profuse blooming crimson. This last was crossed with Springfield, a carmine sort, and produced Anna Webb in 1882, which yet holds its own in some sections as the standard crimson. At this time I had for white, besides Degraw, the Boule de Neige, and because of its stronger habit, expected much from its seedlings. Seed was freely produced and plants grew vigorously, most of them resembling the parent in habit of growth, but for some reason the flowers were inferior as a rule. I saved one for some years and named it Silver Lake.

Peter Henderson was another white which had some valuable characteristics. All its progeny however, reproduced the tendency to incurve, and after two year's trial it also was given up as a seed parent. Experience so far pointed to the old Degraw as the best pistillate variety, and I used it as such, crossing with healthy, strong growers to eliminate if possible, its weak stem.

After Anna Webb appeared in 1882 I tried for a white of the same habit, but crosses between it and white varieties seldom brought pure white. They were either crimson or variegated.

By this time it was evident that it did not pay to fill a greenhouse with seedlings in winter.

The best time to grow seed by crossing is when flowers can be found having pistils well developed. This requires careful watching in some varieties, which, like the Grace Wilder, rarely show more than the rudiments of pistils, though plenty of pollen is found in Wilder flowers. February, March and April are the months when most of the seed is set. The pollen matures first and can be found by the use of a magnifying glass in nearly all varieties at some time in the year. A camel's hair pencil is the most convenient thing to use in conveying it to the flower to be fertilized. When the pistils are ripe enough they have a viscous surface which causes the pollen to adhere. If the cross is successful the flower withers in a day or two, when the petals should be removed and the calyx split to the bottom by pulling some of the petals downward through each division; or the calyx may be removed entirely. This is to prevent decay of the seed pod by the retention of water. About two months is required to ripen the seed, which should then be cut and kept in the seed pod until the time of sowing. Some sort of label should be attached to the flower stem, showing what the cross is and when it was made. The label is necessary to prevent loss from being overgrown by the foliage, or inadvertently broken off, and the date shows when to gather the ripe seed. It is a curious fact that the pistil is not readily fertilized by pollen from the same flower. If it is, the seed produces poor plants, if any. It may be fertilized by pollen from another flower of the same variety and produce good plants.

After trial, December 10th proved the best time for sowing the seed. The young plants can grow in the seed boxes about two months, the weak ones being weeded out at this stage of growth. They are given the coolest and lightest place convenient, and plenty of air to make them stocky. Sometime in February they should be put in flats and treated as cuttings. Grown in this manner the plants begin to bloom in July, and before the season closes, all will have bloomed which are of value commercially. The early bloomers are the so-called "perpetuals," that will make two crops during the winter and spring. It will be seen that by this method there is the least labor and expense possible. The promising ones only are saved for trial in the greenhouse, the proportion of which grows less and less as the standard of excellence is raised. Of course a great many good seedlings are

*Gardeners' Chronicle, N. S., Vol. 26, 1886, pp. 244, 245.

†Gardeners Chronicle, 1870, p. 382.

‖Annals and Magazine Natural History, 1873, No. 1380, plate VII, Fig. 1.

§Gardeners' Chronicle, N. S., 26, pp. 244, 245; 3d series, Vol. 3, p. 151.

¶Ibid.

¶Michelia, II, p. 559 and 613.

‖Grevillea, IV, p. 123. See also Saccardo Sylloge Fungorum, Vol. IV.

rejected for various reasons. Some with exceptionally fine large flowers fail to open well in cold weather, either bursting the calyx or damping off without expanding at all.

The most sensitive point to decide perhaps, is color; especially in the pink and shaded, which are much influenced by the amount of light, and in dark weather come "off color." In crossing to produce certain colors there seems to be no law which can be relied upon with much certainty. White is the easiest to reproduce, but varies much in different years. In 1890 seedlings from Mrs. Fisher, self fertilized, produced a large per cent. of variegated flowers, while in 1892 the same produced nearly all white.

For the last two or three years I have not crossed different colors as much as ten years ago; seeking now to produce selfs by fertilizing flowers with others of the same color. My effort has been for a long time, to secure a white having the same habit as Anna Webb, by crossing the latter with white varieties, but without success.

Mrs. Fisher, which came from Degraw crossed No. 68, a crimson, is like Degraw in habit though of stronger growth. The influence of the crimson does not appear. When asked by visitors, "What is this?" my reply would be, "An exaggerated Degraw."

One year seed was grown from a plant of fine habit having single flowers, crossed with pollen from a double. A good proportion of the seedling plants produced double flowers. No advantage could be seen in the use of the single flowered parent therefore it has not been continued. In crossing between double sorts there are plenty of seedlings produced which have as much vigor as the single ones. To use the single flowered carnation for seed seems like going back to the beginning, which would be a waste of labor and time. The seed parents should be, if possible, the most perfect commercial varieties we have. This must be as true of plants as it is of animals. Stock breeders of all kinds place great value on the law that "like produces like," the best will produce the best. Even in mechanics the law holds good to a great extent. The manufacturer with the most perfect machinery turns out the finest goods. The plant differs from the machine in that it has within itself the principle of life. It is this unknown force that has the power to develop new forms of growth and product, stimulating the enthusiasm of the grower to consider and study into the conditions, the fulfillment of which, unlocks the treasures of Nature for the benefit of man.

The flower contains the organs of reproduction. Its purpose is to produce seed, and it is a curious fact that it remains expanded, within certain limits, until that purpose is accomplished. A pistillate carnation flower is several days in coming to maturity after opening. Apply pollen from another plant, and it withers in a few hours. Without impregnation it may last a week or two. There are some varieties that seldom have either pistils or anthers. Especially are these lacking during the winter. It is at this season that the flowers are most lasting. It seems reasonable, other things being equal, that flowers thus destitute will be the best for florists' use. Such flowers bear but little seed, and the chance of improvement is diminished by the very conditions of success.

It is evident the grower of new varieties of carnations for commercial use, cannot grow seed by the pound for the seedsmen, which sets a limit in that direction, and explains why seed from the dealers produces so few extra good flowers.

The reputed short life of varieties, and the ever present desire for something new, with the stimulus presented by the chance element which invests the unknown but may be, give sufficient inducement to lead florists to aim at the ideal. It seems to be true of the carnation as of the geranium and strawberry, that varieties are successful only in limited localities; which points to the trial of new sorts, and the retention only of those best fitted to each grower's use.

There is a branch of the subject which I have not been able to develop to much extent; adapted to those whose business is the sale of plants for blooming in the garden during the summer.

In 1884 I grew a very large, fine crimson, and also a white, which had so much of the hardy characteristic that they remained on the bench in the greenhouse without blooming, and making very little growth till nearly spring, blooming finely in May and June. These would undoubtedly have wintered well in a cold frame, and made fine plants for spring sales. Not doing a plant business, they were of little value to me, and so were not preserved. This experience suggests that a race of hardy carnations might easily be obtained which would make a place in the market, and fill the demand for summer blooming carnations in private gardens. Their season of propagation would come in early summer. Not being able to use this class of carnations, I have since given no attention to plants that do not bloom the first season, more than to test their hardiness, and have never grown one that would endure the winter without protection.

To the question "Does it pay to spend labor and time in growing new carnations?" the answer is, "yes, with qualifications." The originator of new plants is kin to the inventor of new machinery, and like him possesses tastes and talents not given to all. Those who are fortunate enough to secure plants of superior merit are appreciated and rewarded. There is no doubt however of the general fact that the user of an invention makes more money from it than the originator. This suggests the reasonableness of growers testing as many of the new kinds of carnations as they can, that they may be able to select and grow those suited to their locality and at the same time encourage the originator.

A writer on the growing of vegetable seeds remarks that "the development of vegetable forms is, in a great measure, due to those who make a given article a hobby." Applying this observation to the subject before us, it is evident that there is room for the labor and study of those who have been termed "carnation cranks." Not only is the flower market to be supplied with the colors fashion demands, but the conservatory of the amateur, and the gardens of the people afford a place for the odd and unique.

There are possibilities in crossing varieties and hybridizing the different species which would meet the requirements of all these tastes and conditions. The large extent of our country adapted to the culture of the carnation; the rapid progress made in the last twenty years in the development of varieties, improving the size and quality of this beautiful flower; the ever increasing demand for it and growing appreciation of its beauty and fragrance; the great number of intelligent men who are giving their attention to the subject, and the enthusiasm manifested:—indicate something of what may be expected in the future.

The unknown is before the grower of new carnations. As he approaches his ideal, it recedes, but leaves behind to reward and encourage, the beautiful specimens we already possess.

Sports and Variations.

BY J. F. COWELL, BUFFALO.

[*Read before the American Carnation Society at the Pittsburg meeting.*]

It is an old saw that "like produces like." If we decide to cultivate a certain variety of carnation we expect that it will continue to exhibit its varietal peculiarities and transmit the same by bud propagation.

But this not always the case. It sometimes happens that a bud is put forth which shows a remarkable departure, either in foliage or flower, from the type. Such a change is bud variation, or as the gardener calls it, a "sport."

Many of our most striking ornamental plants are the result of this kind of variation. Just how or why they occur we do not know, but they have been referred in a general way to atavism; that is, the reversion to some ancestral form. There are many so-called sports, however, that can not thus be referred. We are in the habit of classing as sports any sudden variation, either in form or color, whether the change be beneficial or otherwise—even disease has been propagated as a sport. There are other changes constantly going on before our eyes, that in time result in as great a departure from the type—this gradual change or differentiation we call *variation*, and the altered form is called a *variety*.

It may be that the forces that cause these two classes of variation are the same, the difference being only in the time occupied in bringing it about. We do not, however, expect the same permanence in sports that we do in varieties that are the result of long continued effort. Some sports indeed, refuse to be increased, though as a rule they are readily propagated by cuttings. Neither do we expect to reproduce sports from seed as we do in most varieties. Though even this rule has exceptions, as some sports come true when raised from seed. It would be of great interest to all of us if we could be taught the philosophy of these sports and variations. If so we could control the plant that it might be forced to sport in a desired direction. It is easy to find theories, but difficult to find one that is consistent that will explain the mystery. It is accepted as a fact by many that the unit of vegetation is the cell. The cell, though apparently so simple, is in reality most complex and contains within itself the elements and impulses to multiply, to adapt itself to its surroundings, to form either root, stem or flower, as may be necessary to the fulfillment of the general plan of its genus, to dress in plain workday garments, or to glorify itself with all the hues of the rainbow. The tallest tree is but a community of these little cells, modified to suit the varied requirements of the structure. The new branch or bud is but beginning again at the foundation with the simple cell; from this the new individual is built up, partaking, as a rule, of all the characteristics of the primal cell. The continuance of the type must depend upon the balance of the elements in this initial cell, as all future growth is mainly a multiplication of this.

Now, suppose that from some cause the elements of this mother cell have lost their relative positions or balance—that

this element has been retarded or this accelerated—may not the result be so great as to produce a sport? More especially if the cause of disturbance continue to act for a time. Each new cell partaking of the new character would weaken the tendency to revert and the variation becomes susceptible of propagation. It seems to me that the slower change which we call variation, and which is gradual and cumulative, is due to the same causes, acting less violently. The practical question for us to answer is: what are the forces which cause this change in the cell elements? It is an axiom, that in order to exist the individual must be in harmony with its surroundings. The plant, unlike some of the animals, can not alter its environment, but must alter itself to agree with changed conditions. The chief forces that affect the plant are light, heat and nutrition. We know many of the effects of these forces and we can to a certain extent predicate the results of certain treatment with them.

But there are other forces, accidents possibly, which acting continuously from generation to generation may produce marked variation. I do not refer to the action of insects, though they doubtless have caused some of the changes in plants. Probably irritation or stimulation from any cause will, if long enough continued, produce perceptible changes. How far we may bring these forces under control, or how permanent the effects will be, is yet to be determined. There are some variations of simple character that have been caused apparently by intention that seem to be permanent enough for the purposes of the horticulturist. Many cases have been cited to prove that this or the other method of treatment have brought certain results—that high feeding produces an abundance of foliage, or that starvation methods dwarf the growth, but stimulate the essential organs, etc. It is, I believe, an established fact that the last endeavor of the plant is to reproduce itself. If we injure it or thwart its natural methods it attempts to provide for its future in another way.

Now let us turn to that class of variation which accompanies sexual reproduction. Here we have the new plant arising from the intermixture of two or more cells somewhat differentiated. It is not strange that the union should produce a new plant differing in some respects from either parent. It is to this kind of variation that horticulturists of to-day are paying marked attention. Variation from seed comes without effort, indeed, it requires great care to preserve a variety in its purity when propagated by seed. Taking a plant as a type and raising its progeny under different conditions serves to differentiate them so that in a few generations we have different varieties, which when crossed give rise to still new varieties. Still this variation keeps within specific limits. It is only by careful selection through a series of generations that this tendency to minor variation can be checked. The change required to constitute a new variety to the florist is often of little significance to the botanist.

The fertilization of flowers according to the degree of relationship between them is distinguished by the terms close-fertilization, cross-fertilization and hybridization. Close-fertilization is the fecundation of a flower by its own pollen; cross-fertilization is by another flower of the same species, and hybridization is when the applied pollen is taken from the flower of a different species. Within these limits there are many gradations—the fertilizing of a flower by its own pollen is uniting cells that have formed almost simultaneously, from the same immediate parentage and under similar conditions, and therefore but little change is to be expected in the offspring. The union of two flowers on different branches of the same plant offers a little chance for variation. The crossing of flowers of different *strains* of the same variety gives still greater chances—but the hybridizing of species, on account of the great differentiation in many cases, gives the greatest variation. As before indicated, in crossing varieties and hybridizing, we are uniting cells more or less different in their elements, and we expect that the progeny will partake of the characteristics of both parents. Yet in the more violent crosses we are often surprised by the progeny's resemblance to one only of the parents.

It is also true that when we attempt to propagate hybrid plants from seed we find that the seedlings revert to an ancestral type, seeming to have eliminated all characteristics of one parent. And it is only after years of patient labor that we can sufficiently overcome this tendency to rely upon seed propagation. It is doubtful if this tendency is ever eradicated, probably deep down in the heart of the cells lies the long forgotten impulse, latent and wasted perhaps, but ready, when properly stimulated, to assert itself and claim recognition as a new variety.

These are some of the reasons that lead us to believe that many sports are due to atavism. Bearing on this subject of the permanence of hereditary traits Dr. Gray says: "Upon the general principle that progeny inherit the whole character of the parent all varieties must have a tendency to be reproduced by seed, but the inheritance of the new features of the immediate parent will often be overborne by atavism."

When we have made new combinations of the cell elements by hybridizing or crossing we have, as we have seen, a mixture that is not to be depended upon to reproduce itself by seed—we have in fact, to use a physical phrase, got the cell contents into a state of unstable equilibrium where each successive impulse tends to remove it further from the parental type. Not only is this true in reproduction by seed, but I should expect that much mixed varieties would not be strictly permanent when propagated by buds—in fact, we know that they are more prone to vary than those of the pure blood. Still, notwithstanding this tendency to revert, we can reasonably hope to establish new characters when they appear, though we may have to make many attempts before we succeed.

Here is another quotation from Gray: "When the offspring *does* inherit the peculiarities of the immediate parent, or a part of them, its offspring have a redoubled tendency to do the same, and the next generation still more, for the tendency to be like the parent, grand-parent and great grand-parent now all conspire to this result and overpower the influence of a remoter ancestry."

The principle variations desired by carnation growers seem to be in color, size and form of the flower and freedom of growth and flowering habit in the plant. It will be impossible in a paper of this character to more than mention some of the more striking points in regard to these variations—the subject of color alone would require a volume to do it justice. Color, considered botanically, is a minor variation, but to the florist it is one of great importance. Colors of flowers have been divided by M. de Candolle into two series: the xanthic or yellow and the cyanic or blue.

It was formerly the theory that flowers were confined by these classes; that we should never have a blue rose or a blue primula. But a more intimate acquaintance with the flora has demonstrated the fact that there are many exceptions to the old rule and the idea seems to be exploded.

In the yellow series we have the shades from yellow-green to orange-red; in the blue series those from blue-green to violet-red; red being the intermediate point. In the carnation we have the blue series pretty strongly represented, we have the blue-green and we have the violet-red, hence I think we may reasonably look for a blue in the future.

Now let us see what the means are at our command for producing changes in color. It is said that color is largely a matter of nutrition. If this is the case then it is necessary to have plenty of foliage to nourish the flower, and this means high culture for the plant. Light is also a necessity—the more light the more color. In fact, stimulation of any kind tends to intensify and increase the color. Many special foods have been recommended for producing special colors, but this is perhaps only a transient effect. The pigment must be present in the flower in order that reagents may act upon it, to produce the color. The endeavor of the florist must be to increase the pigment. The crossing of flowers seems to stimulate the secretion of coloring pigments, as well as to invigorate it in other ways. Probably the best way to proceed to produce a desired color is to cross two flowers, each containing the desired color in its composition, then, according to the law already laid down, the desired shade should be increased and intensified, because we have the combined heredity of both parents toward the result desired. The use of a white parent is often useful to break up and dissolve a color combination and separate a wished-for color. White also is one of the best bases when we wish to produce variations.

Size is another variation that is desired by the most of us. This too is to a great extent a matter of nutrition. As a rule stimuli that affect the foliage affect the petals. Crossing often produces remarkable results in this direction. The general principles of breeding apply in this endeavor to increase the size of special parts. The experience of animal breeders has been that in breeding for size it is not always best to select the very largest to breed from, but rather to take the "large medium," as they term it. Probably this rule will hold good in plant breeding.

Form and number are important considerations to the originator of new varieties. Form is mainly a matter of breeding. Number, that is the number of parts of the flower, plays a leading part in florist's flowers. While double flowers are, as a rule, abortions, yet they are in demand and must be produced to order. There are two variations which are known as double; in once case we get an increased number by the conversion of stamens into petals; in the other case we have a multiplication of parts, both petals and stamens, and in extreme cases an increase in the number of pistils.

I think it was Darwin who observed that the doubling of flowers was due to a weakened reproductive energy. That this is the cause of doubling, I doubt, but the fact is undisputable that the reproductive powers of double flowers are often defective. In some forms of double flowers the reproductive organs are destroyed

by the petaloid change or are smothered by the mass of petals. This variation seems to be readily transmissible. It has been the theory of some that starvation was the cause of doubling and that the growing of plants on dry and sterile soils was favorable to this end. My own experience has not been such as to convince me of the truth of this theory. It has appeared to me that vigorous growth and high nutrition were more likely to produce this effect. If by any method of treatment we can modify the necessity for seed production, it should cause a corresponding modification in the reproductive energy. If by any means we can apply special stimuli to the petals, they should increase at the expense of the stamens and pistils.

Many instances of doubling have come under my observation, some that seem to testify against the theory of starvation. A friend of ours in Buffalo has a few hundred very fine cyclamens which are divided into two lots. One lot has been grown on the intensive plan; they have been stimulated ever since they were sown; they have had bottom heat, top heat and the richest of soil. The result is that they are a most vigorous lot of plants. But some of them have "gone crazy." Some have flowers regularly doubled; some have extra petals sticking out in all directions; and some have gone so far that they have produced flowers from branches of the petioles. The other lot, which have been grown in a more natural manner, show none of these abnormal conditions. I have at home a double blue primula which occured under high culture. I have also a double canna, which has always enjoyed the richest part of my garden. I believe that it is the rule that our double flowers lose petals when the plant is impoverished and that this loss of petals is, to some extent, compensated for by increased reproductive energy.

Doubtless you all know of flowers that run single when the plant becomes exhausted—the carnation Garfield for instance. In my way of looking at the evidence, it seems to me that it is rather some disturbance of relative structure or function that causes doubling; and crossing and high feeding are among the greatest of these disturbing causes. It is a matter of common knowledge that any injury that threatens the life of the individual plant is often followed by a phenomenal crop of seed, or at least an attempt to produce it.

The flower at whose shrine we worship to-day belongs to a genus which is prone to vary and which responds quickly to the skill of the gardener. It is a flower of great antiquity and its double form has been known "since the memory of man runneth not backward." Its very name suggests its doubleness. In the oldest work at my command—Dioscorides—it is described as double. It is a curious fact that with all its wealth of petals it still retains so wonderfully its reproductive power. Not only the ovary and stigmas, but the stamens persisting when not actually smothered. Long may it live and flourish, and may even its shadow be doubled.

Diseases of the Carnation other than the Rust.

BY BYRON D. HALSTED.

[*Read before the American Carnation Society at the Pittsburg meeting.*]

The reason for excluding the carnation rust (*Uromyces Caryophylinus*, Schr.) from this paper is that it received a thorough treatment by Professor Arthur at the Buffalo meeting of this Society a year ago. It only need be said in passing that the predictions then made are more than fulfilled in that the rust has widened its range greatly during the last twelve months. A large number of rusted specimens have recently been received from various parts of the country. It is doubtless a much dreaded enemy to the carnation grower and the greatest care should be taken to not introduce the rust into the greenhouses in plants from other localities. And it goes without saying that only stock absolutely free from the rust is suitable for seedlings.

FIG. 1. LEAF SPOT OF CARNATION.

There are several diseases of fungous origin of the carnation besides the rust and the first to which attention is invited is the so-called leaf spot.

THE CARNATION LEAF SPOT (*Septoria Dianthi*, Desm.)

Carnation growers recognize the work of the leaf spot fungus by the light brown patches upon the leaf and frequently the stem is in like manner affected. It is not confined to any one portion of the plant but upon the stems it is most frequently noticed midway between the joints or parts of leaf insertion. It is more abundant in the lower than the upper half of the leaf and is particularly frequent upon the broad sheathing base of the leaf. The leaf that is troubled with the spot fungus often becomes contracted at the affected part and usually the upper portion bends downward at this weakened place. A leaf with a dozen spots may have several bends downward and some sidewise, and a whole plant thus badly diseased presents a distressed appearance indeed. Besides the brown and lifeless area without definite size or outline which the fungus produces, there is a development upon the brown spot of a multitude of minute almost black specks. These can be seen with the naked eye upon an old spot but with a hand lens they are counted with ease.

These dark pimples consist of the microscopic threads of the fungus so interwoven as to produce a minute flask buried beneath the surface of the carnation leaf, and inside of which a vast number of slender, almost needle like bodies are produced. These are the spores, and through an opening produced in the upper side of the cavity they ooze out when mature. They are mingled with a viscid substance, and when water is applied to the leaf this expands and pushes out of the opening as a semi-solid, and may then either become dissolved in the water, or dry down into a hard mass to be softened when more water falls upon the spot. This formation of the spores and their exit have a practical bearing upon the question of methods of applying remedies. While the spores are not developed superficially, they are poured out upon the leaf and at irregular intervals, depending upon the conditions that obtain upon the surface of the pimple. For example, if any pimple is filled with mature spores, the best way to induce a discharge of a considerable number of them is to add water. The spores thus brought to the surface are spread to other portions of the plant by the movement of the liquid, or when the water is evaporated the spores are left free to be carried to the other parts of the house by currents of air. Which of these means is most effective in spreading the trouble is not known, but it would seem that the wet method is most favorable, and most of all, when the plants are being watered with a hose which throws the water with some force. It is easy to see that a spray playing upon a healthy plant through one affected with the spot would quite certainly carry the germs along and leave them in the drops upon the former to germinate. This accounts possibly for the excess of affected spots at the bases of the leaves where water remains the longest, and therefore the conditions favoring the development of the fungus are greater than elsewhere. It is reasonable to conclude that it would for example be better to spray toward than than from a diseased plant.

Figure 1 shows three spots of the *Septoria Dianthi*, two upon one leaf and one upon another, all magnified about two diameters. The subject is not an easy one to illustrate with photo engravings.

THE CARNATION ANTHRACNOSE (*Colletotrichum Dianthi.*)

There is a serious disease of carnations which may be characterized by the rapid manner with which it causes the decay of the affected tissue, and the profusion of spores produced free on the ends of radiating threads, which are intermingled with black sharp pointed hairs, arranged in microscopic rosettes upon the surface of the stem or leaf.

This fungus is especially fond of moisture and therefore its range upon the plant is not usually so great as the septoria. While not confined to any one part, it is most frequently found upon the bases of the lower leaves and those portions of the stems that lie upon or are close to the ground. The upper leaves are not infested with this anthracnose, but they may be much enfeebled because of the decay caused by it in the stem below. Not infrequently one or more branches arising from near the ground may be badly anthracnosed, and the foliage above will, in consequence, be sickly in appearance and bear no blooms. More than any other fungus this one removes foliage and branches from beds that are allowed to grow as a thick mat and have a wet bottom due to a lack of evaporation.

The greatest damage however, is done by the anthracnose in the cutting bed. It is not unusual for a propagator to lose fifty per cent. or even the whole of the sets. It seems quite probable that the filaments unobserved were in the stock plants, and when placed under the new conditions of the sand bed soon developed, and the cuttings began to decay at the base and died. Before the cuttings fell, the dark, almost black spore spots of the fungus might have been seen. This form of damping off is particularly contagious on account of the rapidity with which the spores germinate. By actual test cases of inoculation, fully-developed spore-bearing spots have been produced upon healthy carnation stems in three days, when these stems were kept moist as are portions of cuttings below, and close above the surface of the sand.

Gardeners have frequently observed that some stock is much worse than others, which in large part can be accounted for on the ground that the fungus is not uniformly distributed in mature plants. It is scarcely necessary to add a word of caution here, so well known is it to propagators that only the best of healthy plants should be used as stock.

Figure 2 shows a portion of a carnation stem badly infested with the anthracnose. It works still more rapidly upon the leaves when the tissue is less dense.

THE CARNATION LEAF MOULD (*Cladosporium sp*)

Complaints have been made that a mould was damaging the carnations, and a study of this trouble has been under consideration. The disease shows itself on the leaves, often the younger ones near the tips of the stems, and it usually appears in nearly circular spots varying from a sixteenth to a sixth of an inch in diameter. In the worst cases the whole leaf, and even the entire top of the plant becomes mouldy. At first the spot is of a pale ashy color, and covered with a fine dense growth of mould, but the color changes to a gray shade, sometimes approaching dark brown. The fungus is one of the many gray moulds belonging to the genus Cladosporium, and bears its multitudes of spores upon the sides of the filaments which come from the leaf through the stomata or "breathing pores" and afterwards branch in an irregular and profuse manner. The spores are borne above the surface of the leaf and when ripe, easily fall away and become the means by which the infection is carried by water or air to some healthy spot where a new point of infection may be produced. On account of the spores being produced free, that is, not enclosed in any wall it seems probable that the fungicides would be quite effective with this enemy.

A BACTERIAL DISEASE OF THE CARNATION.

Bacterial diseases are not easy to describe and the one of the carnation assumes many conditions depending largely upon the stage in the progress of the disorder. The germ is exceedingly small and is only seen when the high powers of the microscope are employed. This low form of plant organism has no filaments so common to the leaf spot, anthracnose and moulds already considered and therefore no conspicuous spore formation is to be found upon the surface. Attention is attracted to the victim by the manifest lack of vigor and the consequent failure to produce the usual growth and number of blooms. The peculiar rich light green of health is replaced by a yellowish shade which is not uniform, in all parts. If an apparently healthy leaf from such a sick plant is held up toward the light as between the observer and a window many pellucid dots will be seen scattered throughout the leaf. These translucent dots vary in size from those that are seen only with a hand lens to the size of the head of a pin and many become as large as a half dime. When small they are almost always circular and resemble the dots found naturally in the leaves of the common St. John's Wort (Hypericum perforatum). These dots are produced by the bacteria, which, swarming in the cells, destroy the ordinary leaf green (chlorophyll) and by multiplying and passing to neighboring cells cause the enlargement of the spot until finally the diseased areas coalesce and the whole leaf becomes discolored and dies. The discoloration is an interesting feature and one that may be used to detect the nature of the disease. In some plants before the trouble has gone very far the foliage will exhibit very marked spots of a conspicuous purple color. They seem to be one of the results of the action of the bacteria. As before stated the first observable destructive action of the bacteria is upon the green granules of chlorophyll and following this is the development of the purple color. As far as my observation go this color is most conspicuous in those varieties with pink blooms. In the yellow sorts it has been noticed that almost at once the pellucid pits or dots assume a manifest lemon tint and white sorts seem to be the least of all inclined to develop any color.

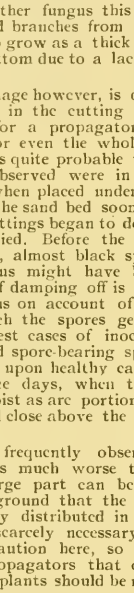


FIG. 2. ANTHRACNOSE OF CARNATION.

From the peculiar manner in which the bacteria begin the work of destruction at many hundred of points possibly in a single leaf it is quite natural to suppose that each spot has its origin in a single germ. The rate of multiplication is so very rapid that it is only a question of favorable conditions and a brief period for a million microorganisms to swarm at any initial point.

It is natural to presume that the germs enter the leaf from the air and the microscopic inspection of the young sports shows that ample provision is made for the easy entrance of the bacteria through the vast numbers of stomata. The pores are favorably constructed for retaining these minute germs, being somewhat funnel shaped, into which they may drop when the guard cells are open. The microscope more than this demonstrates that the point of inoculation is at the base of a pore or stoma.

If these statements are facts and the bacteria of the carnation, comes from without, enter the plant through the stoma and afterward breed destruction in the tissue in which they thrive, it follows that the remedy must be applied to the leaf surface at the time when the germs are reaching the plant and effecting an entrance through the pores of the epidermis. It is very possible that spraying the plants with a fungicide will be able to do much to check the ravages of the bacterial trouble. Surely there is every season to suggest an attempt to get control for from the nature of the enemy and the habit and anatomy of the victim there is little hopes of gaining ground by any process that involves hope without works.

Figure 3 shows a carnation plant natural size in the last stage of the bacterial disease. There is an occasional shoot struggling upward but the bulk of the foliage has passed the stage of usefulness.

At Figure 4 is shown portions of two bacterialized leaves twice magnified with the circular spots prominent. The leaves have become somewhat wrinkled from loss of vigor.

REMEDIES FOR CARNATION TROUBLES.

The point that most interests carnation growers is that of the best way to hold the fungous enemies in check. The knowledge of the nature of the enemies is always the first essential. If their habits are understood a person is able to apply remedies that would not otherwise be suggested. These fungous troubles do not usually come into the plants through the roots and are not carried up with the sap. They enter from without by the spores coming in contact with the surface of the plant and their germinating, sending their microscopic filaments into the victim. The rapidity with which this infection takes place depends upon the prevalence of the germs in that vicinity, in this instance a green house, and the heat and moisture that obtain. Fungi as a rule are lovers of dampness and a good

FIG. 3. CARNATION WITH BACTERIAL DISEASE.

FIG. 4. BACTERIAL DISEASE OF CARNATION (MAGNIFIED THREE DIAMETERS.)

degree of heat. To reduce the number of germs of any disease of carnations in a house is a task of no small proportions. The ideal house contains no noxious spores therefore no rusty, mouldy or blighted plants and at the same time has the heat and humidity most desired by the carnations. It goes without saying that plants already worthless from fungous disease should be speedily removed. Care as commonly understood goes a great way toward warding off fungous diseases. If all the conditions of soil, manure, temperature, sunlight, moisture, fresh air and the like are most favorable the plants will naturally be strong and therefore be better able to stand the inroads of the fungous enemies. Much depends upon the training of the plants that they be kept up from the earth or otherwise the anthracnose will flourish because of the excess of moisture in the shaded and ill ventilated portion.

But it is not my purpose to give instruction in these things only so far as they relate to the production and prevalence of fungous enemies. Let it be borne in mind that carnations are grown under conditions that are qiute favorable to the diseases of the sort above named and any day a neglect of the strict rules of sanitation may be the beginning of decays for a long time to come.

After everything under the head of nursing has been planned for the plants and while this is being daily carried out there are certain direct remedies that may be employed. While these fungi are destructive they are also quite easily destroyed by certain compounds which are harmless to the carnations. No substances have proved more effective as fungicides than the compounds of copper and they are adopted by orchardists quite generally in the better fruit regions of the world. There is no reason why the gardeners should not avail themselves of the researches of the experiment stations along these lines and apply these compounds to the improvement of the plants of the greenhouse and ornamental grounds. Time will not permit the enumeration of the triumphs over the rot, mildew and other destructive diseases of the vineyard. Pears are again grown where their profitable culture had been despaired of, and apples, quinces and in fact various sorts of fruits and many vegetables are grown successfully upon the ruins of former crops because the spraying pump is a regularly adopted implement and the application of fungicides as much a part of the work of the orchard as that of fertilizers.

There are many of these mixtures for the prevention of fungous disease of plants but the three that give the greatest promise are:

(1.) Potassium sulphide solution: Potassium sulphide, one ounce; water, ten gallons. The potassium sulphide is a solid costing fifteen cents a pound and is easily dissolved in the water as needed. In some cases it has been most convenient for me to dissolve the solid in a quart bottle and ask the gardener to pour out the required amount as needed for use. The application is by spraying thoroughly about once a week. The results have been so marked that in one instance a large grower of carnations after using this mixture for a season wrote me that he felt confident that it had saved him a great deal and that if generally used would prove a blessing to all who are affected with carnation diseases of the sorts above mentioned. Possibly it would be a benefit when rust is the leading enemy.

(2.) The Bordeaux mixture: Perhaps the best fungicide now in use in orchard and garden is the Bordeaux mixture. This is made as follows: Copper sulphate, three pounds; lime (unslacked), two pounds; water, twenty-two gallons. Dissolve the sulphate of copper in one vessel and slack the lime in another, then mix the two and dilute to the required strength. This is the so-called half strength Bordeaux mixture which has during the past season proved equally effective with the full strength in many instances, and

for carnations will be strong enough. It is seen that this is a lime mixture and the foliage will be covered with a bluish white layer. But it is to be remembered that this does not differ greatly from the natural color of the carnation leaf and stem, and it is one that can be quickly removed from the portion sent to market. A weekly spraying of the plants with this Bordeaux mixture should prove remunerative in houses troubled with fungous enemies. The Bordeaux mixture is inexpensive, the copper sulphate (blue vitriol or blue stone) costing eight cents per pound.

(3.) The ammoniacal solution: A third compound that does not have the lime and therefore gives the sprayed plants no marked coating is the ammoniacal solution of copper carbonate. Its formula is as follows: Copper carbonate, five ounces; aqua ammonia (26), five pints; water, fifty gallons. The copper carbonate is first wet up with water into a paste and the ammonia slowly added until the solution becomes clear. This can be kept in a bottle and the required amount diluted as desired for spraying. The carbonate of copper costs thirty-five cents a pound and ammonia sixteen cents a quart, and therefore enough for spraying a large house weekly is a small bill of expense.

Taking all things into consideration it is probable that the three preparations above described are arranged in the order of excellence, the best being placed last.

In conclusion it may be said that if everything in the way of attention and care has been given to the carnation bed and spraying is practiced thoroughly and continuously there is little doubt that the Divine flower will repay the owner liberally for all that has been put upon it. It belongs to a royal family and needs to be treated in a kingly fashion, then will princes bow down and worship it and queens traverse the desert to behold its crown.

Experiment Station, New Brunswick, N. J., February 15, 1893.

Seasonable Hints.

Tomatoes that are growing among the carnations will need considerable attention. The lower leaves should be plucked off to within one or two of the first blossom. As the flowers open they must be pollenized at least every other day. The simplest and best plan is to have a short stick about one-half inch square with a cup hollowed in one end. Each pistil is touched with this cup, the latter serving to hold the pollen. Unless attention is given to this matter the vines will not set their fruit properly and will give but a meagre crop. Later in the season simply shaking the vines may answer the purpose, but it is always surer and safer to go carefully over all the flowers by hand. As soon as the tomatoes become topheavy they must be tied up. The most convenient plan is to use heavy twine, tying one end loosely around the plant near the ground and the upper end to a screw eye or nail fastened in the sash bar. As the plant grows it is simply twisted around the string. All side shoots are pinched off, the terminal bud alone being allowed to grow. If the foliage becomes too thick some of it is removed. Tomatoes thus grown as a second crop are profitable where a market can be obtained for them, even late in the season when outdoor fruit is in the market. The preference is always given to hothouse tomatoes by epicures, and many of the large hotels prefer them at all seasons when they can be had. The carnations, as we have said, do not suffer materially and as the season advances and the flowers decline in price the tomatoes take their place.

Sweet alyssum is another crop that may be grown with carnations. It is but little trouble and the money received for it clear gain, saving only the time it takes for bunching the flowers. The double variety is the only kind grown for this purpose. The cuttings are struck in March or April and the young plants carried through the summer, preferably in the house, as they can then be better protected against their greatest enemy, the cabbage worm, which would soon destroy them. Three-inch pots will usually suffice, but they must not be allowed to become pot bound. It must be well headed in until a month or six weeks before planting. The plants are set along the edge of the benches on the south side, one to every second row of carnations and at about the time the carnations themselves are planted. They will luxuriate here and delight in about the same condition of temperature and moisture as the pinks. The spikes should be allowed to grow pretty long and when cut for market made up into neat bunches of 25 each. Alyssum sells well during the winter months, but after Easter is not very valuable to the grower who has not a local trade. Great quantities are used in the cheaper grade of floral work.

The south side of the benches along the walks also affords a good place for starting seeds and we have grown the small round forcing radish finely in the same place. A crop of these little radishes can be taken off nearly every month and do not hurt the carnations in the least.

Avondale, Pa. W. R. SHELMIRE.

Miscellaneous Seasonable Hints.

This a good time to take off your violet cuttings. If your stock of violets is healthy, cut off enough runners for your next year's crop. Some put them in flats of sandy soil and leave them there till planting out time. It is better to put the cuttings in the sand; such a bed as you would propagate carnations in is just right. When rooted pot into 2 or 2½-inch pots. After a few weeks in a temperature of 50° you can move them to a cool night temperature or cold frame.

I have put in cuttings of ivy geraniums this week. They will still make fine plants for baskets, vases, etc.

It is about time to think of starting dormant roots of Caladium esculentum. Perhaps you have not bought them yet? Do so at once. The large bulbs the size of cocoa nuts I never found useful. Those bulbs measuring from 2½ to 3 inches in diameter are the useful size. *Don't* pot them in 5 and 6-inch pots and place them on the bench. They will take six weeks to start and perhaps rot. Place them in flats with 3 inches of sand, the top of the bulb even with surface of sand. Place the bulbs close together, plunge the flats in a warm propagating bed, or what is better on the hot water pipes. In a very few days they will have made roots, you can pot them and they will go right ahead.

French cannas can also be started the same way. After dividing the roots into one crown I start the French cannas at once. The old varieties which are grown only for the effect of their leaves I would not start before middle of March.

We have now entered Lent and the florist who does a general retail business will find quite a lot up in work. Don't send good workmen home because you are a little slack. I have several boys busy at two jobs, which though not gardening must be attended to. You have a few dozen hot bed sash, perhaps a few hundred. Get the broken glass in at once. Have all the *very* dirty pots washed. If dry and not very dirty, washing can be dispensed with and a dry rub will do. Don't put your night fireman at it. It will make him melancholy. Give all the men a turn at it and give them hot water. Put a little life into the job and a good many thousand will be washed in a day.

This is the best time to overhaul your collection of palms. They may not want a larger pot or tub, but you have time now to sponge them, examine the drainage and shift if needed. Some of our most useful palms differ much in the pot room they need. Areca lutescens likes plenty of root room and if kept warm will grow rapidly. Kentia Forsteriana and Belmoreana will thrive for several years in the same pot, and if used for decorating should only be shifted when absolutely necessary.

There is no better time than the present to attend to your orchids. If you have any orchids at all you will be sure to have a large proportion of Cattleya Trianæ, C. Percivaliana, Lælia autumnalis and anceps. When out of flower, as most of them will be now, look them over, and have them thoroughly sponged. A few may need larger pots or baskets, some will need wiring firmly on the block to which they are attached, and most all of them will be greatly helped by removing the old worn-out sphagnum or fern roots and a top dressing of fresh material applied. It is better in all respects to do it before they begin to grow.

If you have any cyclamens or primulas left over, don't waste valuable time in keeping them over another year. Away to the rubbish pile. A good large "dump" pile is always a sign of a progressive florist. WM. SCOTT.

Buffalo, N. Y.

Philadelphia.

On Monday and Tuesday, the last two days of the season, business was excellent, but there was quite a perceptible difference the balance of the week. A violent snow storm set in Friday afternoon and in two hours the entire street car system of the city was tied up. It was impossible to get a car to any part of the city. We do not remember ever seeing such a blockade before and it was not until the next day that they commenced running on time. This interfered with business to a considerable extent, and quite large stocks of flowers had to be carried over Sunday by the dealers.

Prices have not fallen much, though there will be a drop before long in the fancy roses at least. The 75 cent mark for Brunners will have to go; it is too high for Lent. Carnations, too, are weakening and $1 a hundred will be considered enough in a few days. Valley has dropped to $2 and we would imagine at this price the dealer has a little the best of it. Violets are becoming very plenty, and while the price remains the same the bunches grow larger, which is the way the violet growers have of evening things up. This refers to the single varieties. The doubles, of which there are very few raised about here, are getting cheaper. No one has succeeded in producing good double violets in this neighborhood. There is an opening here for a good grower of these flowers.

Bulbous bloom is very plenty. Great quantities of tulips are to be seen in all the stores. They are mostly supplied in

the flats in which they are grown, 50 bulbs to a box, and are cut off as wanted. Romans and daffys are also very plenty.

Prices are about the same as last week: Mermets, Brides, La France, 8; Cusins, 6; Perles and Gontiers, 4; Guillots, Wootons, Bennetts, 5 to 8; Meteors, 10; Beauties, 20 to 40; Belles, 50; Laings, 40; Brunners, 60 to 75; carnations, 1 50 long, 75c for short; valley, 2; daffys, 4; tulips, 4 to 5; freesia, 1 to 1.50; Romans, violets, single, 4 a hundred bunches, double, 1 to 1.50 per hundred.

In blooming plants there is quite a variety. Daffys in pots, also Dutch hyacinths are in. Choice plants of heather from Harris and Lonsdale help to make a variety, and Lonsdale has some good plants of Acacia Drummondii, the blossoms of which stand out from the plant and are about the size and shape of mulberries. It attracts considerable attention. Why is not Acacia pubescens grown to a greater extent? There is certainly a demand for it and at good prices.

John Walker, foreman for Robert Craig, sailed Saturday last for Europe. He has gone to take a general view of the situation and pick up novelties in general and probably some in particular. We wish him a safe journey and anticipate with pleasure his account of the trip, which he will no doubt give before the club on his return.

Mr. Edward Weathered, of New York, was in town this week. His mission was business, in which he was very successful.

Mr. J. R. Murdoch, of J. R. & A. Murdoch, Pittsburg, was here in company with their foreman looking at Philadelphia greenhouses, getting points for a new range which they are about erecting.

K.

New York.

The exhibition committee of the N. Y. Florists' Club, J. M. Keller, chairman, has issued a circular to the members outlining their intentions regarding the first monthly exhibition of plants, cut flowers, etc., which it is proposed shall be held about March 13. Entry slips are enclosed with the circulars, which intending exhibitors are requested to fill out and return, and the active participation and aid of florists and commercial and private growers is earnestly solicited.

Already quite a number of entries are in, including such growers as James Dean, Pitcher & Manda, E. Asmus, J. M. Keller, J. G. & A. Esler, Wm. Tricker and C. H. Allen. It is not yet decided where the show will be held, as it, as prospects now indicate, more space will be required than the club room affords it will be necessary to secure a small hall centrally located for the occasion.

Siebrecht & Wadley's annual orchid exhibition will be held at the nurseries at New Rochelle, N. Y., from February 20 to March 4 inclusive. This exhibition has heretofore been held in some public hall in New York City, but Messrs. Siebrecht & Wadley have agreed to participate in the New York Florists' Club's exhibition at Madison Square Garden, hence the change in program this year.

Ernst Asmus is sending in some very fine double lilac. The flowers hold on much better after cutting than do those of the single varieties. The new rose Madame Caroline Testout is very handsome as sent in now by Mr. Asmus and meets with great favor from retail buyers on account of its beautiful color. Mr. Asmus says that he finds it a very prolific bloomer, every shoot, no matter how small, bearing a flower. Mr. Asmus has given up the use of tobacco stems entirely in his houses. He now uses tobacco extract which he distributes by means of steam through the houses, using a small special boiler for the purpose. Eleven of his old houses are to come down in the spring to be replaced by an equal number of new iron ones of best construction.

The cut flower trade is very quiet as is always the case the first week of Lent. There is more stock coming in than a good market can be found for. Bulbous stock, tulips and Harrisii lilies especially, is badly overloaded with no demand. Magna Charta roses are also sold with difficulty unless of highest grade. The first Jacqs are beginning to appear. As soon as they are more plentiful the Meteor will have to retire to seclusion for a while. This will be easily accomplished unless Meteors improve much in quality over those now coming in. The Bridesmaid rose is becoming very popular and always sells well in advance of the Mermet. Carnations and violets are plentiful and cheap.

The Arion Ball on the night of February 17 was one of the great affairs of the season. The big Madison Square Garden was decorated by Hanft Bros. There was a border of palms and flowering plants encircling the entire area and the festooning overhead made a fine show. The decoration is spoken of as one of the most pleasing ever put up in the Garden.

Boston.

Mr. James Comley, who has recently returned from a trip to Japan, has a large and interesting collection of novelties in plants and seeds which he collected while there. Another big invoice is expected in April, and it is altogether likely that Mr. Comley will furnish plenty of work for the exhibition committees of the Mass. Horticultural Society for the next two years at least. Besides these horticultural treasures he has many other beautiful and interesting souvenirs of Japanese life in the way of paintings, photographs, embroideries and trinkets which he never tires of showing to his friends.

On Saturday, February 18, Mrs. P. D. Richards read an essay before the Mass. Horticultural Society on native flowers and ferns, which was very interesting to the large audience present. Mrs. Richards is an ardent student and lover of the wild flowers, and there are few people who have such an intimate knowledge of the indigenous plants of Middlesex county.

On a table in the rear of the hall was an imposing floral display from Mr. Jas. Comley. The centre was a pyramid over six feet high composed entirely of Wistaria sinensis, the base being a bed of camellias. Among the other cut flowers shown were some blooms of the beautiful Rhododendron Veitchianum lævigatum.

Cut flower trade shows no sign yet of any suffering on account of Lent; prices remain as high as they have been for the past month, and good roses are none too plenty. It is not expected however, that this pleasant condition will long exist, but that with the coming of warm sunshiny days, things will take a big drop. Among the novelties now in market are heath, Acacia pubescens, English primroses, etc. Heath is always a leading flower in this market during spring, and this years' crop appears to be of best quality. Smilax, asparagus and adiantums are rather scarce. There are no hybrid roses to speak of, but Jacqs of good quality are beginning to appear in fair supply.

Mr. E. N. McLaughlin is dangerously ill.

Mr. John A. Sheppard, of E. Sheppard & Sons, has gone to Florida on account of poor health.

Chicago.

The present week shows a slight decline in prices, flowers being more plentiful, but sales are still good. For a day or two after Lent began there was a slight falling off in the volume of trade, but this did not last, and present prospects are good. Roses are more plentiful, and much better in quality; some very good Jacqs are in, bringing from $20 to $25. Beauties are very poor, and no hybrids (excepting Jacqs) are in from local growers. The Jacqs are in excellent demand. Some fine carnations are seen, a grower at Desplaines furnishing unusually good Tidal Wave, but a large quantity is sent from the east, especially of the varieties little grown here. Some extra fine Lizzie McGowan received this week sold very rapidly as fancies, and the same may be said of several other good sorts.

Dutch hyacinths are coming in large quantities, and are very good; the same may be said of daffodils. Freesia is excellent and plentiful; very fine valley is seen. Among tulips, white and yellow are the staple kinds; the reds do not sell well, and there is no great stock of pink, the latter being for the most part very pale. First-class pink tulips will command a better price than any other color. Violets, while not scarce, are in very great demand, and sell rapidly; double ones only are now sold. A few white violets come in; there is a small demand for them chiefly among regular customers. White daisies are brought in, but they are mostly poor, and do not realize much. Retail trade is reported as brisk generally.

T. J. Corbrey & Co., are about to double their ice-box capacity in the Exchange, owing to the demands of increased business.

J. T. Anthony has taken a trip to Pittsburg, to attend the meeting of the Carnation Society.

Lewis M. Noe of Madison, N. J., was a recent visitor in Chicago.

Baltimore.

The past week has been one of surprises as far as weather is concerned. We have had in the short space of seven days weather that would suit any season of the year. One day with the thermometer at 62° would have answered, the second day after we had the heaviest snowfall of the season, and on Sunday night the thermometer dropped 25° in eight hours with a raging gale from the northwest. The fireman who banked his fires at 10 p. m. with an outside temperature of 32° raked them out hastily at 6 a. m. with an outside temperature of 7°.

Miss Mary Patterson, of R. & M. Patterson, 223 W. Madison street, was quietly married to a Mr. Johnson of this city last week.

Mr. E. A. Seidewitz, of Annapolis, will open a store on Lexington street, between Liberty and Charles, next week.

Business has been very irregular, but rather dull as a rule, with demand very little in excess of supply except for La France, which seem very scarce.

MACK.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

Catalogues Received.

Parsons & Sons Co., Flushing, N. Y., nursery stock; National Plant Co., Dayton, O., trade list plants; D. M. Ferry & Co., Detroit, Mich., seeds; Wm. Parry, Parry, N. J., nursery stock; Webster Bros., Hamilton, Ont., plants; Vilmorin-Andrieux & Co., Paris, France, seeds; Henry Nungesser, New York, grass and tree seeds; J. Palmer Gordon, Ashland, Va., plants; Louis Vieweg, Quedlinburg, Germany, seeds and plants; V. Lemoine & Son, Nancy, France, plant novelties.

THE AMERICAN FLORIST and *Gardening* together to one address for $1.75. Send orders to the American Florist Co.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—As foreman 17 years' experience, 10 as propagator; commercial place preferred. For first-class place only address
F F G, care American Florist.

SITUATION WANTED—By a practical florist, with 15 years' experience; married, no children. A good place and treatment expected. Address
FLORIST, care American Florist.

SITUATION WANTED—By competent gardener and florist, German, 35 years of age; best of references for private or commercial place. Address
F G, care American Florist, Chicago.

SITUATION WANTED—Gardener and nurseryman; a young man who has had practical experience in the business. Good testimonials. Address
FREDERICK EDMUNDS, care American Florist.

SITUATION WANTED—By a gardener and florist, commercial or private; first-class references, single, 28 years of age. State wages. Chicago preferred. Address J. J., box 68, Riverdale, Illinois.

SITUATION WANTED—By single, honest man, German, experienced in all branches of gardening, wishes permanent position in gentleman's place. References. W. St., care 183 Fulton st., Brooklyn, N. Y.

SITUATION WANTED—As foreman in a cut flower establishment; have had 20 years' experience around Chicago; am single, best of references. Around Chicago preferred. Address
J H B, care American Florist.

SITUATION WANTED—To take charge of gentleman's country place by a practical gardener 30 years old, married, small family; good references.
W. W. LEHMAN,
box 154, Cannonsburg, Washington Co., Pa.

SITUATION WANTED—A capable florist wants position by March or April with a retail florist, age 25; experience from one of Chicago's first commercial places. State wages. Address
JACK, care American Florist.

SITUATION WANTED—As foreman in a commercial or private place; has a thorough knowledge of roses, orchids, stove and greenhouse plants and their culture; 25 years' experience. Address
FLORIST, care Nanz & Neuner, Louisville, Ky.

SITUATION WANTED—As gardener and florist, thoroughly competent in all its branches. American and European experience. English, single. Best of references. Address R. HUGHES,
care F. N. Lawrence, Bayside, Long Island, N. Y.

SITUATION WANTED—By a practical middle aged single gardener, a successful rose grower who has devoted his lifetime to the business; capable of taking charge of large establishment; good habits and can give satisfactory references. Address
PRACTICAL GARDENER, 148 S. Green St., Chicago.

SITUATION WANTED—German, 22 years of age, 8 years' experience without youth, 3 years in this country; thoroughly experienced as florist and gardener; can speak, write and read English; able to take charge of a private or commercial place. Best of references. State wages.
CLEM. PRUDENS, 154 Wilmot Ave., Chicago.

WANTED—Practical florist; single man. Address, stating wages, etc., Box 161, Boise City, Idaho.

WANTED—A young man with some experience in greenhouses and a fair education. State wages per month including board.
FLORIST, Box 353, Middletown, N. Y.

WANTED—To buy a florist business near or in Chicago consisting of from 3 to 5 houses. Will exchange a farm of 160 acres in Kansas for above. Address X Y Z, care American Florist.

WANTED—200 to 500 Beauty Poitevine geraniums. Would take them in small lots if they cannot all be had together. State price. Address
JOS. T. PHILLIPS, West Grove, Chester Co., Pa.

WANTED—A young man over 20 years of age to assist in general greenhouse work. Wages $15 to $20 a month with board. Address
L, care Henry F. Michell,
1018 Market St., Philadelphia, Pa.

WANTED—Coachman and gardener to work on my place at Des Moines, Iowa. Must be sober and industrious. Address, stating wages expected, with references. A. N. PRYOR,
503 W. Grand Ave., Des Moines, Iowa.

WANTED—Gardener with some capital, man thoroughly reliable and competent to take charge of a well established business in cut flowers and plant houses well stocked. Prefer selling small payment down; give long time on balance.
A R, care American Florist.

WANTED—A florist of experience and ability to establish himself in one of the most attractive suburbs of Chicago on the north shore. To the right man with some capital proper encouragement will be given in the way of assured business and financial aid. Address K, care American Florist.

WANTED—A competent all-round gardener and florist; must be well recommended and understand growing vegetable plants, and with a thorough knowledge of greenhouse work, including roses, bulbs, chrysanthemums, etc. Address, stating age, married or single, and wages wanted.
L D, care Johnson & Stokes, Philadelphia, Pa.

FOR SALE—I will sell my rooted cutting business, greenhouses, etc., at a bargain; well established well advertised and growing.
S. B. FIELD, Roselle, N. J.

FOR SALE—Flat top boiler, 17 3½-inch flues, 8 feet long, in use two seasons, in good condition; will heat 2,000 feet 4-inch pipe.
LEWIS TURNER, Kenosha, Wis.

FOR SALE OR TO LEASE—Eight greenhouses containing about 30,000 feet of glass within 12 miles of New York City. Enquire of A. HIBBINS,
139 Dodd St., E. Orange, New Jersey.

FOR SALE—Unequaled opportunity for a live florist to purchase a small, well-paying established business. For all particulars address
Box 432, Haverstraw-on-Hudson, N. Y.

FOR SALE—Paying florist's business, large selected stock, good patronage, home and abroad, ¾-acre lot, good dwelling, splendidly located; best reasons for selling. Address PROF. BAGLEY, Abilene, Kans.

FOR SALE—Riverview greenhouses, well stocked; 4,000 feet of glass, dwelling house, barn, etc., three blocks from business centre, one from street railway; also two acres of land and 6,000 pansies, wintered outside, ready for spring trade. A rare chance to secure a well established business. Good reasons for selling. For further information address
LEWIS REYNOLDS & SON,
Box 285, Sarnia, Ontario.

WANTED.

Foreman for commercial place (10,000 feet glass) near Philadelphia, growing general cut flower and bedding stock for first-class retail trade; must be single, industrious, a polite salesman and able to handle workmen. Wages $75 per month and board ($18) with advance if satisfactory. Address, with copies of references, J R, care of 1018 Market St., Phila.

WANTED, A FOREMAN.

Capable of taking charge of a large establishment where cut flowers are grown. Must have had great experience and be able to furnish best of references. Send full information, giving age, whether married, copies of references, etc. A good position and a good salary to the right man. Position ready any time before June 1. Address
Grower, care American Florist.

FOR SALE.

In Andover, Mass., 5 greenhouses and ⅝ acre of land. Land worth $1200. Greenhouses all stocked; splendid local trade. Andover is 21 miles from Boston; hourly trains; 3 academies. Owner in poor health; wishes to go to California. Price low; easy terms. Address
Box 372, Andover, Mass.

AN OPPORTUNITY.

We have for rent a store and conservatory fitted for a florist. It is on Wisconsin street, one of Milwaukee's busiest streets. It has been occupied by Geo. Volk for about two years, consequently is more desirable for a beginner than a store unknown to flower buyers. The charge is reasonable. For further particulars apply to the
WISCONSIN FLOWER EXCHANGE,
131 Mason St. **Milwaukee, Wis.**

FOR SALE.

Ten greenhouses, about 15,000 square feet of glass, with two acres of land, and stock for sale very cheap. The houses are in good condition, situated in one of New England's best localities, with a large and extra good home market; heated by a first-class steam plant, cost $1200, pots and implements. This is a fine opportunity for one wishing to buy an Established Business, as the property is in good condition, ready for the coming season, and will be sold, as the present owner has other interests to look after.

For further particulars apply to
N. D. WINTER,
No. 5 Elm Street, Springfield, Mass.

WANTED.

To know where plants of Onychium auratum can be procured. Address
P. O. Box 422, Washington, D. C.

FOR SALE.

An old established florist business with stock and good trade; or will take an energetic young married man with small capital as partner. Furnished residence on place which can be occupied by partner. Address for particulars
M. Tritschler, Nashville, Tenn.

CHRYSANTHEMUMS

We Offer for a Short Time the Following Standard Sorts. The Plants are in the Pink of Condition.

					Per 100
W. H. Lincoln,	stock plants,	4-in pots			$15.00
H. E. Widener,	"	"	"	"	25.00
Ivory,	"	"	"	"	25 00
Domination,	"	"	"	"	15 00
Mrs. Geo. Bullock,	"	"	"	"	15.00
L. Canning,	"	"	"	"	15.00
W. H. Lincoln,	"	"	2-in.	"	3.00
H. E. Widener,	"	"	"	"	5.00
Ivory,	"	"	"	"	4.00
Domination,	"	"	"	"	3.00
Mrs. Geo. Bullock,	"	"	"	"	3.00
L. Canning,	"	"	"	"	3 00
Potter Palmer,	"	"	"	"	5.00
Ruth Cleveland,	"	"	"	"	5.00
Mrs. E. D. Adams,	"	"	"	"	6.00
Minnie Wanamaker	"	"	"	"	5.00
Mrs. Irving Clark,	"	"	"	"	3.00
Louis Boehmer,	"	"	"	"	3 00
Mrs. B. Harrison,	"	"	"	"	3.00
Kioto,	"	"	"	"	3.00

Rooted Cuttings ready Feb'y 25th of the following Varieties:

Mrs. Geo. Bullock, L. Canning, Kioto, Domination, Mrs. B Harrison, Louis Boehmer, at.....$1.50 per 100
H. E. Widener, Ivory.....$2.50 per 100
25 at 100 rate. Packing free.

JOHN IRVINE CO.,

Bay City, Mich.

P. S. Adiantum Capillus Veneris, 2-inch, a fine lot now ready for shipment at $5 per 100. Nephrolepis Exaltata, 3-inch, $7 per 100.

PLANTS. FLOWERS.

Mendenhall, the Pioneer Florist of the Northwest, always to the front with the finest, healthiest, cleanest stock of Roses, Carnations, Smilax and all kinds of Bedding plants to be found. Prices low. Send for catalogue. Cut flowers at wholesale and retail. The pure air of Minnesota is good for man, beast and plants, and Minneapolis is the place, and Mendenhall Greenhouses is the name to address for anything good in the florist line.

MENDENHALL GREENHOUSES,
MINNEAPOLIS, MINN.

CARNATIONS, ROOTED CUTTINGS.

Silver Spray, Portia, Lamborn..... $1.50 per 100
Grace Wilder, Lizzie McGowan..... 2.00 per 100
Plants from flats, 3 and 3½ cents. Write for prices of plants and cuttings of foliage and Pkt. Geraniums, Coleus, Chrysanths, Feverfew, etc., Columbines, Hollyhocks, Honeysuckles and Climbing Roses, strong, cheap.

DENVER CITY NURSERIES,
Mention Am. Florist. **South Denver, Colo.**

	Per 100	Per 1000
CLEMATIS, standard varieties . . .	$1 00	$9 00
NEWER KINDS.	$1.50 to 2 00	
COLEUS	75	6 00

Send for prices on Chrysanthemums, Alternanthera, Snow Crest Daisy, etc.
JOHN J. CONNELLY, Bryn Mawr, Pa.

NOVELTIES IN CANNAS.

These four sorts are unquestionably by far the best varieties that have been sent out since the introduction of Mme. Crozy; they are all equally good, if not superior, but entirely distinct in every way.

FOR the past two or three years we have made the improved varieties of Cannas a specialty, and have gathered together for trial everything that has been offered that we have considered promising, and in pursuance of our usual policy of working up large stocks of the best things after thorough trial, have pleasure in offering the following novelties which we can recommend, and which our customers can purchase with entire confidence and can recommend them to their customers, as they are novelties of extraordinary merit and will give unquestioned satisfaction. The improvement in this class of plants is so marked there will be no place for the so-called French Cannas that were grown even two or three years ago, from this time out. Every florist in the United States who sells plants should invest in these Cannas to a greater or lesser extent. They make one of the finest plants for the decoration of the greenhouse that one can have, and the flowers can be used for cut flowers in decorative work with most telling effect, as there is nothing that approaches them in brilliancy and grandeur. For bedding plants for grouping on the lawn they are brighter than any other plant, and unite, with brilliant flowers, foliage of tropical luxuriance. We introduced Mme. Crozy very largely last season, and everyone who purchased it has been more than pleased with it. We have without question the largest stock of Mme. Crozy to be found anywhere, and can furnish it in any quantity. We now offer four novelties for this season, which we have propagated extensively, believing them to be the best and most distinct and valuable kinds in their respective colors that have been sent out since Mme. Crozy.

ALPHONSE BOUVIER.—This is the grandest Canna, all things considered, introduced up to this time. It is a very luxuriant grower, growing considerably taller than Mme. Crozy, throwing up flower stems freer than that variety. In good ground and under good cultivation the plant will grow eight feet. The tips of the shoots are surmounted by immense clusters of bright crimson flowers of the very largest size, and nothing can exceed their brilliancy. It has a peculiar habit of dropping the flower cluster a trifle as the second flowering shoot begins to push above the first, and the shoots flower two, three or more times, one after the other, a large plant in bloom sometimes having on as many as thirty or forty of these large brilliant clusters of flowers. Grand is the only word that describes this variety. It was sent out very little last Spring, but there was no supply of it to be had at anything like a reasonable price, and we purchased all we could obtain of it, paying as high as $1.25 each for it; but there was none to be had even at this high price. We were fortunate, however, in securing a larger supply of it than any one else, and are pleased to say we can offer it at a low price the coming season. We think for general bedding purposes it will, if anything, surpass Mme. Crozy—at least, if not surpass it, it certainly will meet with equal favor. As a pot plant for greenhouse cultivation, it is not so desirable on account of its taller growth, but for bedding purposes in many ways it will be superior. It is entirely distinct, and as the color is absolutely different, one will not conflict with the other in any way.

CAPTAIN P. DE SUZZONII.—We have tested all the yellow varieties of Cannas that have been introduced so far up to this time, and can say without hesitation this variety is the best yellow Canna introduced so far. It is almost as large a flower, with about as broad a petal, as Mme. Crozy, with a very large spike of bloom, and is slightly mottled with scarlet. The scarlet markings are such, however, that instead of detracting, as is usual with most of the yellow Cannas that have been so marked heretofore, it intensifies, if anything, the brilliancy of the yellow. There is a great demand for yellow Cannas on account of the desirability of the color and this is bound to have a heavy run in consequence. It has a distinct habit of growth, the foliage very nearly approaching the banana.

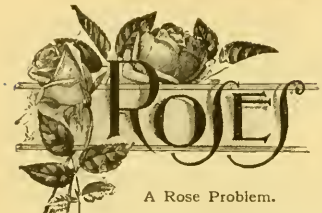
PAUL MARQUANT.—This variety is not much known, but it is one of the most distinct of all the varieties, and one of the most beautiful. Many who have seen it in our houses have considered it preferable to any other variety, not excepting Mme. Crozy. The individual flowers are larger than any other, and the flower spike very large, each flower standing out separately by itself. The flower is as fine as the finest orchid. The color is very hard to describe, to give any adequate idea of how beautiful a shade it is. It might be described as a bright salmon, with a carmine tint. The flower has a silvery lustre, which glistens and lightens it up with a silvery sheen, making the salmon of the flower very brilliant. Some have described it as apricot—a shade that is so fashionable at the present time. For greenhouse culture it is one of the finest of all, as the growth is not as tall as the two preceding sorts.

MISS SARAH HILL.—This variety somewhat approaches Alphonse Bouvier in color, but is entirely different in every way. The flower spike is held erect and upright; the crimson has considerable carmine in it, and so it may be called a carmine-crimson. It is entirely different from Alphonse Bouvier in the style of the flower spike, and in the habit of growth; the flower spike is held erect, and while the head is not so large as Bouvier, it is of more dwarf growth, and holds its head of bloom a trifle longer than Bouvier. Its main merit lies in the fact of its being more dwarf, so that it can be used where it would not be practicable to use Alphonse Bouvier.

PRICE, $6 00 PER DOZEN; $40.00 PER 100. PRICE FOR LARGER QUANTITIES ON APPLICATION.

F. R. PIERSON COMPANY,

TARRYTOWN-ON-HUDSON, N. Y.



A Rose Problem.

ED. AM. FLORIST:—Can any of your readers tell me why my rose bushes in the center of my house make no growth for about three months during the winter, while both ends of the benches do well, although the end furthest from the boiler does the best? The entire house gets the same care and attention.

The house is 22x155, heated by one of Hitchings' No. 17 boilers and piped with 4-inch pipe as follows: 3 pipes under front bench, 2 under No. 2 bench, 1 under No. 3 bench and 3 under the back bench.

My reason for asking is that there is a diversity of opinion as to the cause, some claiming that there is not pipe enough in the middle of the house. Thinking that some of your subscribers may have had this same difficulty I would be pleased to learn the result of their experience,

SUBSCRIBER.

ROSES.

TEAS . . . . . $30.00 per 1000
HYBRIDS . . . . . 40.00 per 1000

Healthy plants, in 2-inch pots.
Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.
Trade list on application.

Jacob Schulz,
LOUISVILLE KY.
Mention American Florist.

Hybrid Perpetual Roses,

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.
Price Lists to applicants. Address

WILLIAM H. SPOONER,
JAMAICA PLAIN, (Boston), MASS.

FORCING ROSES

All the old, and such new varieties as have been proved, kept in stock.

M. A. HUNT,
TERRE HAUTE, IND.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.
SEND FOR PRICE LIST. . . . . .
ANCHORAGE ROSE CO., Anchorage, Ky.

Roses of Rare Excellence; strong 1 and 2-yr., outdoor grown, budded and own roots. Leading Nurserymen call them "best ever seen." Shall we express sample?

	100	1000
Climbing, 2-yr., 3 to 5 ft., own roots	$8	$70
" 1-yr., 2 to 3 ft., own roots	7	60
Hyb. P., 2-yr., 2 to 4 ft., budded or own roots	9	85
" 1-yr., 1½ to 2 ft., " " " "	8	75
Mad. Plantier, 2-yr., 2 to 4 ft., own roots	8	70
" " 1-yr., 1½ to 2 ft., own roots	7	60
Moss, 2-yr., 2 to 4 ft., budded or own roots	9	85
" 1-yr., 1½ to 2 ft., budded or own roots	8	75

Evergreens, 2, 3 and 4 feet, fine. Full Stock Fruit Trees, Ornamentals—Everything! Stark Bros., Louisiana, Missouri.

WHITE LA FRANCE, KAISERIN AUGUSTE VIKTORIA, CHRISTINE DE NOUE.

THE NEW ROSES.

Rooted Rose Cuttings our Specialty.

HEALTHIEST. CHEAPEST. BEST. . . . . .

Send for Catalogue and Prices with Testimonials.

C. STRAUSS & CO., Washington, D. C.

Largest Growers in the World of Roses for Cut Flowers.
Mention American Florist.

ROSES. ROSES.

PLANTS FOR FLORISTS.

BRIDESMAID, strong, 2½-inch pot plants . . . . . $12.00 per 100

	Per 100	Per 1000
METEOR	$4 00	$35 00
CLOTHILDE SOUPERT	4 00	35 00
PERLE DES JARDINS	5 00	40 00
CATHERINE MERMET	4 00	35 00
THE BRIDE	4 00	35 00
MARIE GUILLOT	4 00	35 00
NIPHETOS	4 00	
MME. HOSTE		4 00
HERMOSA		4 00
SOUV. DE WOOTTON		4 00
PAPA GONTIER		4 00
MME. PIERRE GUILLOT		4 00
ETOILE DE LYON		4 00
MALMAISON		4 00

General Collection of TEAS, BOURBON and POLYANTHAS in 50 leading varieties, $4 per 100; $35 per 1000.

	Per 100
GERANIUMS, in fine assortment, per 1000 $35,	$4 00
CANNAS, large flowered, French, in 15 varieties	8 00
" large flowered French, in 8 scarce sorts	15 00
" Madam Crozy	15 00
" Tall growing varieties	4 00
DAHLIAS, a choice collection, strong roots	8 00
CALADIUM Esculentum, 7½ to 10 in. circum	7 00
" " 6 to 7½ in. circum	5 00
" " 5 to 6 in. circum	3 50
BEGONIA Rex, in 12 named sorts	5 00
" Vernon	8 00
CARNATIONS, Edna Craig and Grace Battles	12 00
POPPIES, Bracteatum and Royal Scarlet	8 00

Full assortment of Hardy Shrubs, Vines, Herbaceous Plants, Pæonies, etc. Large supply Hybrid Perpetual, Moss and Climbing Roses, field grown.

CATALOGUES AND PRICE LIST FREE.

THE STORRS & HARRISON CO.,
. . . . PAINESVILLE, Lake Co., OHIO.

PERLE ROSES.

ALSO BRIDES AND MERMETS.

No better stock in New York State. Orders solicited for April or May delivery, in 2½-inch pots; or in 4-inch pots June and July.

NIPHETOS, BON SILENE AND MME. HOSTE IN LIMITED QUANTITIES.

Salter Bros.,
42 W. Main Street, ROCHESTER, N. Y.

CANNAS.

	Per 100
ADOLPH WEICK	$3.00
EMILY LE CLAIRE	3.00
EHMANNI	5.00

Good sound bulbs.
JOHN DALLAS, Fairfield, Conn.

10,000 Vinca Major Variegata Vines

Strong Rooted Cuttings.
$3.00 per 100; $25.00 per 1000. Cash with order.
MARTIN BRAENDLEIN, Mapleton, Indiana
Mention American Florist.

$80.00 THE ROSE $15.00

BRIDESMAID.

THE

PERMANENT-PINK,

NEVER-DEFORMED

MERMET.

OF IT

MR. T. J. SLAUGHTER writes from Madison, N. J.:

JANUARY 3, 1893.

* * * "It gives me pleasure to give the BRIDESMAID my hearty recommendation: from my experience with it this year I am convinced it will supersede the Mermet entirely, owing to its better color and greater market value. I intend to give it in future all the room I can possibly spare. I think growers will go for it strong another season."

Plants from 2½-inch pots, $15.00 per 100

SPECIAL OFFER of Rooted CUTTINGS, only in lots of one thousand each, price $80.00 per lot. Beautifully rooted; carefully packed.

FRANK L. MOORE,

CHATHAM, NEW JERSEY.

Golden Returns.

200,000 ROSES 200,000

We offer well established, healthy plants in below named and many other sorts:

From 2-inch pots, $ 3.00 per 100; $30.00 per 1000
From 3-inch pots, 6.00 " 60.00 "
From 4-inch pots, 12.00 " 120.00 "
Not in excess of any one variety.

50,000 Hybrid Perpetual Roses 50,000

at $4 per 100; $40 per 1000, in 50 select varieties.

New and Rare Varieties at Special Rates given in our Wholesale List, now ready.

WE NAME A FEW SORTS ONLY:

Aurora, Bosanquet, Comt. de Labarthe, Bon Silene, Cels, Devoniensis, C. Mermet, Etoile de Lyon, Hermosa, Mme. Cusin, H. M. Stanley, Malmaison, Marie Guillot, Mme. Lambard, Marie Lambert, Marechal Niel, Kruger, Niphetos, Mme. Jos. Schwartz, Safrano, Perle des Jardins, Sombreuil, The Bride, etc., etc.

For anything in the Florist line, or send your lists to be priced. Address

NANZ & NEUNER,

LOUISVILLE, KY.

I WILL OFFER CHEAP

FOR NEXT 30 DAYS,

The following Roses, rooted in December, and as fine and healthy stock as any grower can send out.

SEND FOR PRICES.

Bridesmaids,	**Richardias,**
Brides,	**Amaryllis** of sorts,
Mermets,	**Daybreak** carnations,
Perles,	**Geraniums,**
Sunsets,	**Smilax** and
Niphetos,	**Florists' Seeds.**

Address E. HIPPARD, Youngstown, O.

"American Belle."

Has one distinctive quality that all Belles desire but which is vouchsafed to few, and that is the quality of

GROWING OLD GRACEFULLY!

The crime of filling a first-class order with American Beauty blooms past their prime, will wring the tender hearts of Mr. Westcott and his compeers no more now that we have a rose that will last a few days cut without turning livid. Are you with me?

JOHN BURTON, Chestnut Hill, Phila.

ROSES. ROSES. ROSES.

• YOUNG • ROSES. •

LA FRANCE, MERMETS, BRIDES, HOSTE, GONTIERS, NIPHETOS, METEORS.

Beauties, Brunners, Laings and Magna Chartas.

Write us for further information.

La Roche & Stahl 13th & Chestnut Sts., PHILADELPHIA.

MADAME CAROLINE TESTOUT.

The best rose of its color in existence. It has been fully tested in the New York market and

IT SELLS.

Healthy plants from 2½-inch pots now ready. Per 100, $25 00; per 1000, $200.00; 500 at 1000 rates.

ERNST ASMUS, West Hoboken, N. J.

ROSES.

FINE PLANTS and ROOTED CUTTINGS

AMERICAN BEAUTY,	METEOR,
LA FRANCE,	PERLE DES JARDINS,
CATHERINE MERMET,	WATTEVILLE,
BENNETT,	MME. CUSIN,
BRIDE,	BRIDESMAID,
WOOTTON,	NIPHETOS,
GONTIER.	

Specially fine stock in the TWO MOST FASHIONABLE ROSES grown, METEOR and AMERICAN BEAUTY.

SEND FOR PRICES. CHAS. F. EVANS & BRO., FRANKFORD, PHILADELPHIA, PA.

Mention American Florist.

ROSES. Clothilde Soupert. ROSES.

$6.00 PER 100.

Grand, healthy plants from 3-inch pots, are in splendid condition for Spring sales. We make this price to move them quickly. We want the room for Easter stock.

MERMET, NIPHETOS, BRIDE, GONTIER, WATTEVILLE and HOSTE, from 2-inch pots, $4.00 per hundred.

DAVID CLIFFE, Germantown, Phila., Pa.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

American Carnation Society.

The first annual report of this prosperous young society has been received. It is a neat pamphlet of 96 pages, and comprises the history and doings of the society since its organization in 1891, including the essays read at various meetings, the list of members and a revised list of all the carnations in commerce with name of introducer and date of introduction. The frontispiece is a very fine portrait of President Edwin Lonsdale.

THE COMPLETE premium list of the Pennsylvania Horticultural Society is now issued and may be obtained by addressing the secretary, D. D. L. Farson. It is announced that during the present year exhibitions will be held in connection with the monthly meetings in January, February, April, May, June, October and December.

IN OUR LIST of cemetery superintendents we have named Mr. D. H. Rhodes as superintendent of the National Cemetery at Arlington, Va. This is not correct. Mr. Rhodes is landscape gardener for the national cemeteries and Arlington is his regular station. His P. O. address is Fort Myer, Va., (via.) West Washington, D. C.

IF YOU NEED ANY

Cape Flowers, Immortelles, Grasses, plain or fancy **Baskets, Metal Wreaths, Letters, Doves,** or any other thing in the Florists' supply line, mail us your order.

REMEMBER WE ARE THE

Leading Manufacturers of Wheat Sheaves and Baskets, and Importers of **Florists' Supplies.**

Catalogue on application.

ERNEST KAUFMANN & CO.,

113 N. 4th Street, PHILADELPHIA, PA.

H. BAYERSDORFER & CO.,

WHOLESALE

FLORISTS' SUPPLIES ONLY,

56 N. 4th Street,

PHILADELPHIA, PA.

Our new Catalogue is now out, free upon application.

WHITE DOVES

FOR FLORISTS.

Largest and finest stock in the United States. Write for prices to

S. J. RUSSELL,

103 Van Winkle St., Jersey City, N. J.

AGENTS:

J. C. Vaughan, Chicago, Ill.

H. Bayersdorfer & Co., Phila., Pa.

A 1 Cape Flowers.

The above is the verdict of those of our customers who have placed their orders some time since for our **NEW CROP CAPE FLOWERS** and have already received them. The price is low and quality as above stated. Send for quotations. We have also a complete stock of

Easter Baskets and Novelties of Every Description.

MARSCHUETZ & CO.,

Send your Business Card for our New Catalogue.

23 and 25 N. 4th St., PHILADELPHIA, PA.

Fancy. Dagger.

2,000,000

HARDY EVERGREEN CUT FERNS,

Especially for Florists' Use.

SPECIAL ATTENTION PAID TO SUPPLYING THE WHOLESALE TRADE

FIRST QUALITY HARDY CUT FERNS, $1.25 per 1000. In lots of 5000 and upwards, $1.00 per 1000.

L. B. BRAGUE, Hinsdale, Mass.

Asparagus Plumosus Nanus.

CUT STRINGS: 6 to 8 feet long, 50 cents each. 10 to 15 feet long, $1.00 each.

In large or small quantities all the year round. The largest stock in the country.

W. H. ELLIOTT, Brighton, Mass.

HARDY CUT FERNS?

Oh Yes, over

5,000,000.

I can supply you the year round with A1 goods. Also new Bouquet Green, Laurel festooning, etc.

H. E. HARTFORD,

18 Chapman Place, BOSTON, MASS.

THE SMILAX KING!

Who? **KOFFMAN,**

Where? **WALDEN, Orange Co., N. Y.**

What? **SMILAX**

25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.

When? ALL THE YEAR AROUND.

And he pays the Express.

DAN'L B. LONG,

COMMISSION • FLORIST,

495 Washington St., BUFFALO, N. Y.

FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.

Lists, Terms, &c. on application.

When writing to any of the advertisers on this page please mention the American Florist.

THE CHICAGO CUT FLOWER EXCHANGE

We still have some choice Advertising Space left in the Exchange.

The Headquarters of the Chicago Florist Club is now in the Exchange, which will still further enhance its value as an advertising medium.

SPACE TO RENT ON BLACKBOARD, BY THE WEEK OR MONTH.

Exhibitors making Chicago their Headquarters during the World's Fair, can obtain Desk Room at the Exchange at a reasonable rate.

FOR TERMS ADDRESS

The Chicago Cut Flower Exchange,

45 Lake Street, Chicago.

C. A. KUEHN,

(Successor to ELLISON & KUEHN),

WHOLESALE FLORIST,

1122 PINE STREET,

St. Louis, Mo.

A complete line of Wire Designs.

WM. ELLISON,

(Late of ELLISON & KUEHN),

WHOLESALE FLORIST,

AND FLORISTS' SUPPLIES,

1402 PINE ST., ST. LOUIS, MO.

H. L. SUNDERBRUCH,

WHOLESALE FLORIST

4TH & WALNUT STREETS,

Cincinnati, O.

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.

	Per 100
Perle, Gontier, Niphetos	$ 4.00
Mermets, La France, Bride, Wootton	5.00
Meteors	10.00
Carnations, short	1.00
" long	2.00
" " fancy	2.50
Romans, Valley, Narcissus, Tulips	3.00
Violets, Adiantum	1.00
Callas, Harrisii	12.50
Smilax	15.00

Above prices in effect till receipt of next issue of this paper.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
116 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.; Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange.
45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY & CO.
Wholesale and Commission
FLORISTS,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

WHOLESALE FLORISTS
La Roche & Stahl
N. E. CORNER
13th & Chestnut Sts.,
PHILADELPHIA.
Mention American Florist.

SAMUEL S. PENNOCK,
Wholesale Florist
REMOVED TO REAR OF 42 S. 16th ST.,
Philadelphia, Pa.

CUT SMILAX.
From Nov. 1st to May 1st our price for Smilax will be 20 cents per string. Quality first-class. Prompt attention to orders by wire.
J. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

Wholesale Markets.

Cut Flowers.

NEW YORK, Feb. 21.

Roses, Bon Silene, Gontiers	2.00@ 3.00
" Perles, Niphetos	2.00@ 4.00
" Mermet, Bride, Hoste	4.00@ 8.00
" Cusin, Watteville	4.00@ 8.00
" Bridesmaid, La France	6.00@10.00
" Meteor	8.00@15.00
" Jacqueminot	15.00@30.00
" Beauty	25.00@75.00
" Hybrids	25.00@40.00
Carnations	.75@ 1.00
Valley, hyacinths, tulips	2.00
Daffodils	2.50@ 3.50
Harrisii	3.00@ 8.00
Violets	.50@ 1.25
Cattleyas	25.00@50.00
Mignonette	2.00@ 8.00
Smilax	15.00@25.00
Adiantums	1.00
Lilac (bunch)	1.00@ 1.25

BOSTON, Feb. 21.

Roses, Niphetos, Gontier	5.00@ 8.00
" Perle, Sunset, Wootton	6.00@10.00
" Bride, Mermet	8.00@16.00
" Meteor	15.00@20.00
" Beauty, Hybrids	25.00@75.00
" Jacqs	50.00
Carnations	1.50@ 2.00
Valley	1.00@ 3.00
Acacia	25.00
Cytisus (bunch)	.25
Heath "	.75
English primroses "	.25
Hyacinths	1.00@ 2.00
Daffodils, tulips	2.00@ 4.00
Violets	.50@ 1.00
Mignonette	4.00@ 6.00
Callas, Harrisii	10.00@12.00
Pansies	.75@ 1.00
Freesia	1.50@ 2.00
Smilax	17.00
Adiantum	1.00@ 2.00
Asparagus	50.00

PHILADELPHIA, Feb. 21.

Roses, Perle, Gontier, Niphetos	4.00
" Mermet, Bride, Albany	8.00
" La France	8.00@10.00
" Hoste, Cusin, Watteville	4.00@ 6.00
" Bennett, Wootton, Guillot	6.00@ 8.00
" Meteor	8.00@10.00
" Beauties	25.00@40.00
" American Belle	40.00@50.00
" Brunners	50.00@75.00
" Laing, Magna Charta	30.00@40.00
Carnations	1.00@ 1.50
Mignonette	1.00@ 2.50
Violets	1.00@ 1.50
Valley	2.00@ 3.00
Daffodils	4.00
Tulips	4.00@ 5.00
Freesia	1.00@ 1.50
Callas, Harrisii	8.00@12.00
Adiantum	1.00@ 1.50
Asparagus	50.00@75.00
Smilax	15.00@20.00

CHICAGO, Feb. 21.

Roses, Perles, Niphetos Gontier	4.00
" Mermet, La France, Albany	6.00
" Bride, Wootton, Bennett	6.00
" Beauty	12.00@25.00
" Jacqs	20.00@25.00
Carnations	1.00@ 3.00
Callas, Harrisii	10.00@12.50
Romans Valley	2.00@ 3.00
Violets	1.00@ 1.25
Daffodils	3.00@ 4.00
Tulips	3.00@ 4.00
Freesia	2.00@ 4.00
Smilax	15.00
Adiantum	1.25

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

N. F. McCARTHY & CO.
Wholesale Florists
AND JOBBERS IN FLORISTS' SUPPLIES,
1 Music Hall Place, BOSTON, MASS.
Also entrance from Hamilton Place through Music Hall.
We keep a large supply of Fancies and Carnations always on hand. Return telegrams sent immediately when unable to fill orders.
AUCTION SALES OF PLANTS SPRING AND FALL.

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., **BOSTON, MASS.**
Mention American Florist.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
The finest Roses, Violets and Carnations
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

HENRY W. BAYLIS,
Wholesale Florist
940 BROADWAY,
. . . . NEW YORK.

SMITH, The Florist,
GROWER OF
Fine Roses & other Cut Flowers
WHOLESALE AND RETAIL.
77 S. 7th Street, MINNEAPOLIS, MINN.

The Seed Trade.

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1893. Applications for membership should be addressed to Wm. Moggatt, chairman membership committee, Wethersfield Conn.

CALIFORNIA onion fields planted for seed are looking fairly well.

GENERAL ADVICES from the mail trade do not so far indicate the exceptional boom that has been predicted.

ST. PAUL.—C. E. Underhill, manager of L. L. May & Co.'s seed department, died February 13 of pneumonia. His remains were taken to Philadelphia for interment.

VISITED CHICAGO:—Professor W. W. Tracy, of Detroit, S. M. Emery, Lake City, Minn., E. G. Hill, Richmond, Ind., H. Augustine, Normal, Ill., Chas. P. Braslan, Minneapolis, Frank T. Emerson, Omaha.

MR. FRANK T. EMERSON is of the opinion that the best thing in a retail catalogue cover will be one which shall contain a calender block printed in large type on the front page with a string through the corner of the book to hang it by.

PROF. F. W. TAYLOR, of the Horticultural Department of the Nebraska State University at Lincoln, will this year conduct an extended and careful investigation of the possibility of hybridizing squash, cucumber, melons and other vines when planted together.

RUMORS are again current concerning a general combination of seedsmen in the mail trade. Two features of this question are certainly to be commended,—uniformity of prices and economy on all lines requiring large expense,—catalogues, advertising, seed bags and like supplies.

IN SPITE of all that may be claimed by seedsmen in the mail trade in regard to quality of stock and style of catalogue, the fact seems to remain that many buyers by mail are seeking low prices where ever they can be found, and the tendency toward the closest margins possible on every item of the list must regretfully be conceded.

CLOSE OBSERVERS predict again this season that the poor prices for bulbous flowers will have the effect to discourage florists who have formerly been forcing largely. Of course this is the same prediction which was made last year, but hardly verified as the aggregate demand for such stock did not show a great falling off at the end of the season, but it may be that such predictions will be more fully realized the coming year. Of course the Easter trade is yet to be heard from and may revive the spirits of growers to some degree. In general it may be said that tulips have been this year as last, somewhat unprofitable for forcing. Some growers are inclined to increase their plantings of Miniature or Dutch Roman hyacinths for early spring sales.

CLEMATIS.

	Doz.	Hundred
2 Year Choice Assortment	$3.00	$25.00
1 " " "	2.00	15.00
H. P. Roses, Choice named kinds	1.50	10.00
Monthly " " "	1.25	8.00
Daisy Snowflake, strong plants	.50	3.00
Dahlias, field grown, choice named	1.25	8.00

F. A. BALLER, BLOOMINGTON, ILL.
Mention American Florist.

PYRETHRUM ULIGINOSUM (GIANT WHITE DAISY)

This is a good thing for cutting. Will flower first season from seed if sown early.

Fresh Seed Crop of 1892-93

Trade pkts., 50c. and $1.00.

John Gardiner & Co.,
21 N. 13TH STREET,
PHILADELPHIA, PA., U. S. A.
Seed Growers,
Importers and Dealers.

Trade list on application, but *for those in the trade only.*

The three leading Florist Flowers:
CHRYSANTHEMUMS, CARNATIONS AND ROSES.
ALL THE NEW AND SELECTED STANDARD VARIETIES. . . .

My stock of all are as fine as can be produced at reasonable rates.
Complete list of these will be mailed to all applicants in the trade.

JOHN N. MAY, Summit, N. J.
Mention American Florist.

"CHRYS-COLA"

ROOTED CUTTINGS COLEUS.

I have a large stock of the best bedding varieties, and an extra quantity of Golden Verschaffeltii.

FUCHSIAS. For immediate delivery, Chas. Blanc, W. E. Wait, Black Prince, Noveau Mastadonte, 18 cts. per doz.; $1.00 per 100.

GERANIUMS are ordered to March 10th.

SEND FOR PRICE LIST.

S. B. FIELD, Roselle, N. J.

C. H. JOOSTEN,
3 COENTIES SLIP, NEW YORK,
IMPORTER OF
PLANTS, BULBS & FOSTITE.
Catalogue of Plants and Book on Fostite sent on application.

Sweet Peas.
Full assortment of all the new and leading varieties.
BLANCHE FERRY: oz. 10c.; ¼ lb. 35c.; per lb. $1.00.
W. W. BARNARD & CO.,
6 and 8 North Clark Street, CHICAGO

FICUS ELASTICA.
$5.00, $6.00 and $9.00 per dozen.
JOHN BURTON,
Chestnut Hill, Philadelphia, Pa.

When writing to any of the advertisers on this page please mention the American Florist.

Cabbage and Lima Beans
Going to the show.
Just to tell a hungry world
Burpee's seeds will grow.

Burpee's Farm Annual for 1893
Is Better than Ever Before.

A handsome book of 172 pages. It tells all about the best seeds that grow, including rare novelties of real merit, honest descriptions, hundreds of illustrations, with beautiful colored plates painted from nature. Important new features for 1893—original and interesting. Mailed *Free to intending purchasers;* to others for ten cents, which is less than cost. *Write to-day.*

Burpee's Blue List, giving wholesale prices for Market Gardeners and Florists, will be mailed on application.

W. ATLEE BURPEE & CO.,
Philadelphia, Pa.

FOR SALE.
Alternantheras Paronychioides Major, Rosea.

NEW strong plants of above at $3.00 per 100, 200 for $5.00, per 1000 $20.00.

Extra strong rooted cuttings of Aurea Nana 50c. per 100, by mail 60c. On account of room this could not be potted, all from September grown cuttings.

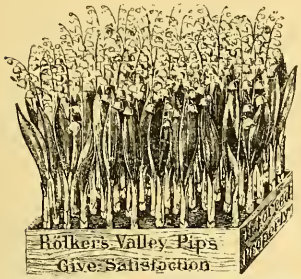
Finest fringed, camellia-flowered double Petunia; strong, 2-inch pots $3.00 per 100; 200 for $5.00. Rooted cuttings of same, $1.50 per 100, free by mail; cash with order. Will book orders for Achillea, the Pearl, at $1.00 per 100, free by mail, ready for delivery about March 1st.

C. G. NANZ.
1007 Walnut St., Owensboro, Ky.

ROOTED CUTTINGS
GOOD ONES.

Verbenas, 22 varieties	per 100,	$ .50
Coleus, 12 varieties	"	1.00
Chrysanthemums, 40 varieties	per doz.	.20
Fuchsias, 10 varieties	"	.20
Heliotrope, 4 varieties	"	.20
Double Alyssum	"	.20
Cigar Plant	"	.20
Manettia Vine and Mexican Primrose	"	.25

I. L. PILLSBURY, Macomb, Ill.



BEST GERMAN FORCING PIPS

Price: $9 the 1000,
$20 the box of 2500,
Less ten per cent. for prompt cash.

August Rölker & Sons
New York, P. O. Station E.

HULSEBOSCH BROS.,
BULB AND PLANT GROWERS,
OVERVEEN, near Haarlem, HOLLAND.

Prices on application for the coming season of

ROMAN HYACINTHS,	PAPER WHITE NARCISSUS,
LILY of the VALLEY,	HARRISII LILIES,
LIL. LONGIFLORUM,	TULIPS,
DUTCH HYACINTHS,	CROCUS,
SPIRAEAS,	ROSES, ETC., ETC.

☞ Spring Catalogue now ready. ADDRESS

A. HULSEBOSCH,
P. O. Box 3118. Warehouse 58 West Street,
NEW YORK CITY.

GENUINE CHINESE SACRED LILIES

In original imported baskets of 30 large fine bulbs, per basket, $1.25.

It will pay you big to grow them. Innumerable flowers can be cut from them. Make money, buy some, order now.

H. G. FAUST & CO.,
64 & 66 N. Front St., PHILAD'LPH'A, PA.
Woodlawn Seed Farm, Pt'ladelphia, Pa., 1,200 acres.

Send for Catalogue of
JAPAN BULBS, SEEDS, AND SHRUBS.
ARAUCARIAS,
AUSTRALIAN Palm Seeds,
CALIFORNIA BULBS AND SEEDS to
H. H. BERGER & CO.
ESTABLISHED 1878. SAN FRANCISCO, CAL.

G. J. MOFFATT,
Manufacturer of
PAPER BAGS AND ENVELOPES
Special attention given to
Seed Bags and Catalogue Envelopes.
NEW HAVEN, CONN.

THE **DREER'S GARDEN SEEDS**
Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly, mailed free to the trade only.
HENRY A. DREER,
Philadelphia.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

WE SELL SEEDS

TO FLORISTS AND DEALERS.

WEEBER & DON,
SEED MERCHANTS AND GROWERS,
114 Chambers St., New York.
Catalogues on Application.

100,000 Selected 3 yr. old **Berlin Lily of the Valley Pips**
offered at our New York Warehouse for $18 per Case of 2500. Wire orders at our expense.

CHOICE SWEET PEAS. Of these we are the largest growers in the world. Large consumers should write for prices and contract for delivery next Fall.

ONION SEED. A few hundred pounds Prizetaker and Yellow Danvers can still be had at reasonable prices.

Offices & Salesrooms, 427-429 Sansome St. 501-503 Clay St., San Francisco, Cal. } **SHERWOOD HALL NURSERY CO.** { Greenhouses, Nurseries, Seed Farm and Trial Grounds, Menlo Park, Cal.

Purchase on the Co-operative Plan.
The advantages offered by the
WISCONSIN FLOWER EXCHANGE
are accessable to all Florists of good standing. We are now making up orders for
Lilium Harrisii and Freesias.
Parties requiring good bulbs at cost, or desiring further information on this subject correspond with us at once. Shipments made from the East or West to all parts of the U. S.

The Wisconsin Flower Exchange,
131 Mason Street, MILWAUKEE, WIS.

BENJAMIN RIMBAUD, BULB GROWER,
Quartier du Temple, Toulon, var, France.
Cable address Benrimbaud, Toulon.

The largest cultures in the South of France, of **WHITE ROMAN HYACINTHS**, Narcissus Paper White grandiflora, N. Double Roman, N. **Double Von Sion**, true pure yellow, and other Daffodils. **Lilium Candidum**, the largest bulbs. Freesias, Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A. Double Rosette the earliest, etc. Prices on application.

Water Lily Seed.

		Trade pkt.	oz.
Nymphæa	Zanzibarensis	.50	$4.00
"	" azurea	.50	4 00
"	Cærulea	.50	4.00
"	Scutifolia	.50	3 00

Tubers and Plants of all leading varieties.
WM. TRICKER, Dongan Hills, N. Y.

ONE MILLION
Trees, Shrubs, Decorative Herbaceous Plants, etc. for landscape gardeners, parks, cemeteries and private gardens.
Catalogues free. Prices low. . . .

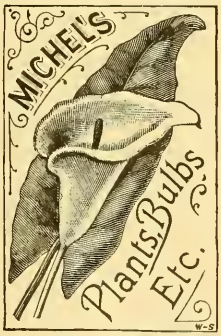
B. M. WATSON,
Old Colony Nurseries, PLYMOUTH, MASS.

Always mention the AMERCAN FLORIST when writing to advertisers.

GROZY ANNAS.

WE ARE **HEADQUARTERS** . . for all the Novelties, and in addition control *EXCLUSIVELY* several grand varieties which we now offer for the *first time*. We will not be undersold on any of the list.

J. C. VAUGHAN,
New York: 12 Barclay Street. CHICAGO. P. O. Box 688.
Greenhouses: Western Springs. . . .



Write for wholesale list.
MICHEL PLANT AND BULB CO.,
ST. LOUIS, MO.

CATALOGUE PRINTING, ELECTROTYPING.
Done with expert ability for Florists, Nurserymen, Seedsmen. Write to
J. Horace McFarland Co.,
HARRISBURG, PA.

Worcester, Mass.

A good steady trade with numerous decorations for weddings and receptions tells the tale for the last two weeks before Lent.

Flowers are plentiful with the exception of roses, which seem to be scarce all through this section, probably the dark changeable weather causing the deficiency. Narcissus, both Von Sion and Spurious, are plentiful and sell well at $1 a dozen. Tulips are a glut on the market; it seems as if the tulip has outlived its usefulness as a cut flower, nobody seems to want them; there is a fair demand for pink, white and blue hyacinths. The carnations are improving every day and are the most popular flower we handle. Violets are coming in in large quantities and are of excellent quality, selling for $2 a hundred.

Lange put in the most elaborate decoration of the season at Colonial Hall the 10th inst. The dancing hall was festooned with Dresden garlands of smilax and Wilder carnations. The fireplaces were banked with palms, begonias, crotons, etc., and specimen arecas and kentias in pink and white baskets completed the picture. The prominent feature of the decoration was a mirror decoration of Lælia anceps, Dendrobium Wardianum and Asparagus plumosus. The mantels over the fireplaces were banked with adiantum and Dendrobium nobile, making a rich and delicate display. The entry was converted into a large conservatory with settees and couches scattered promiscuously among the palms. The dining room was festooned with Asparagus tenuissimus and Fisher carnations, making a very harmonious effect.

Several concerns were a little frightened during the coal famine, but nobody suffered any damage and coal is plentiful now. SEEDLING.

ARE YOU KEEPING such a record of blooms cut as will enable you to tell how much cash per square foot has been produced by each sort this season?

The Snow Crest Daisy fills the bill;
Test it any way you will;
However you must grow it cold;
Then its mammoth size will hold.

Every florist should invest
In this Daisy; 'tis the best;
For design work so complete
There's really nothing quite so neat.

CUT BLOOMS, $1 PER 100, POST FREE.

Large stock fine plants all in bud and blooming, 15 for $1.00; 100 for $5.00; sample plant and bloom for 12c. Double fringed petunias, Dreer's, mixed, all colors, stock plants, 3-inch, strong, 60c. per doz.; $4 per 100; smaller from flats, $2.50 per 100; rooted cuttings, $1.10, post free. The florist double white foreing Petunia, white as the driven snow, fringed and delicately scented, valuable for cutting, design work, etc., stock plants, $1 per doz.; from flats, $3 a 100; rooted cuttings, $1.50 per 100. Double Golden Marguerites, the genuine dwarf, large flowered, stock plants, 60c per doz., $4 per 100; smaller from flats, $2 per 100; rooted cuttings, $1.10, post free. Double Dahlia Sunflower (Helianthus multiflorus), rooted plps ready for potting, 50c. per doz., $2.50 per 100. French Cannas, Fairmount Park strain, reds in variety, dry roots ready for potting, 50c. per doz., $3 per 100; large flowered yellow, mixed, plain blotched, striped; these are extra fine showy kinds 60c. per doz. $4 per 100; a few extra fine bronze-leaved kinds, 60c. per doz. Variegated Vincas, field-grown, 3-inch, $5 per 100; small from flats, $2 per 100. Coleus, Fuchsia, Stevia, Alyssum, double and single, Gem, Feverfew and miscellaneous rooted cuttings, $1 per 100, small plts. $2 per 100. Rooted cuttings per 100 and small plants per doz. post free if desired. Safe arrival and satisfaction guaranteed or money refunded.

Address J. C. GIBSON, Woodbury, N. J.

ROOTED GARNATION
GOLDEN GATE, very fine, $2 per 100.

SMILAX PLANTS,
in 3-inch pots, good bushy plants, $3 per 100.

GEO. A. KUHL, Pekin, Ill.

ROOTED CUTTINGS.
SEND FOR LIST.
CARNATIONS.
GOOD STOCK. GOOD CUTTINGS. GOOD VARIETIES.
FRENCH CANNAS.
Standard sorts; good roots; nothing cheap but the price, $4.50 per 100; $36 per 1000.
AZALEA VERVÆNIANA.
The prettiest one that grows. Good sized small plants at $10.00 per 100. Correspondence solicited. Inspection invited.
L. B. 496. ALBERT M. HERR, LANCASTER, PA.

ROOTED . . . .
CARNATION
. . . CUTTINGS
GRACE BATTLES, GOVERNOR RUSSELL, EXCELSIOR, PEARL, THOS. CARTLEDGE, DAYBREAK,
BUTTERCUP, ANGELUS, CÆSAR, EMILY PIERSON, THE TWO CORONETS.
And most of the other new and old kinds now ready.
C. J. PENNOCK, "THE PINES" KENNETT SQUARE, Chester Co., PA.

CARNATIONS.
DAYBREAK, ALEGATIERE, GRACE WILDER, LIZZIE McGOWAN, PORTIA, PRES. GARFIELD, and SILVER SPRAY. Strong plants.
From 2-inch pots, $3.50 per 100; $30.00 per 1000. Save express by buying near home.
ROOTED CUTTINGS OF THESE VARIETIES ON FOUR WEEKS NOTICE, at $15.00 per 1000.
NAGEL GREENHOUSES,
MINNEAPOLIS, MINN.

Rooted Carnation Cuttings.
WHOLESALE PRICE LIST NOW READY,
Containing a full list of best new and old sorts, including the Prize takers at MADISON SQUARE and PHILADELPHIA.
Address H. E. CHITTY, Paterson, N. J.

ROOTED CUTTINGS
Of the Best Old and Most Promising new varieties of
CARNATIONS.
Write for a catalogue and send list of wants for an estimate.
J. J. Styer,
CONCORDVILLE, PA.

ROOTED CARNATION CUTTINGS.
NOW READY.
Of the best old and new varieties now in cultivation, in small or large quantities. Send for estimate of wants or price list.
ISAAC LARKIN, Toughkenamon, Pa.

Tuberous Begonias.
SINGLE, large-flowering, white, yellow, red, $6.00 per 100; mixed, $5.00.
For blooming after July 1, get some of our Seedlings, we grow them from the finest strains of seed, double and single, colors mixed or separate. Send your orders now. Per 100, mailed, $3.00 and $2.50.
BRAUER & RICHTER, McConnellsville O.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

ORANGE BLOSSOM
CARNATION.
One of the leading new varieties, and an immense bloomer; received a Certificate of Merit in 1891; color Pink, Edged White.
Rooted Cuttings, $3.00 per 100; $25.00 per 1000.
MAY FLOWER, splendid variegated, $2.50 per 100.
THE JENNINGS STRAIN OF PANSIES, trade packet, 2000 seeds, $1.00. Fine, stocky plants, small, 60c. per 100 by mail; $5.00 per 1000 by express.
E. B. JENNINGS,
Lock Box 254. SOUTHPORT, CONN.

ROOTED CUTTINGS of CARNATIONS
By the Wholesale.
Ready now. This is the best time for intending buyers to supply themselves. I offer them at moderate prices. Send for Price List. Address
JOSEPH RENARD, Unionville, Chester Co., Pa.

10,000 Nymphæa Odorata or White Water Lily Roots
FOR SALE.
Price, $5.00 per 100; $40.00 per 1000; or will exchange for seeds plants or bulbs. For further particulars address R. L. CLARK, Randolph, Mass.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser in these columns.

Rooted Cuttings.

Carnations Hinze's White, Mrs. Fisher, Silver Spray, Jeannette, Grace Wilder, Fred Creighton, Mayflower, Century, Anna Webb, $1.50 per 100; $10 per 1000.

Orange Blossom, Portia, Hector, Florence, American Flag, $2 per 100; $15 per 1000.

Coleus, leading varieties, including the finest Yellow Coleus in cultivation. A new variety equal to Golden Bedder in color, and as good a grower as C. Verschaffeltii, $1.00 per 100; $8.00 per 1000.

Double Petunias in four finest varieties, $2.00 per 100.

Fuchsias, finest named varieties, $1.50 per 100.

Heliotrope $1.00 per 100.

Ageratum, Dwarf, White and Blue, $1.00 per 100.

500 at 1000 rates. Cash with order. 10 cents per 100 extra when shipped by mail.

JAMES HORAN, Florist,
BRIDGEPORT, CONN.

CARNATIONS

ROOTED CUTTINGS.

Puritan, Aurora, Golden Triumph, Grace Darling, Daybreak, Pearl, White Wings, Lizzie McGowan, Louise Porsch, W. F. Dreer, J. R. Freeman,

and many other varieties; fine, healthy stock, ready January and after.

HYBRID PERPETUAL ROSES

500 Paul Neyron, strong plants....$10.00 per 100.
20 other leading varieties.....$10.00 per 100.
$80.00 per 1000.

☞ Send for price list.

WOOD BROTHERS,
Fishkill, N. Y.

W. R. SHELMIRE,
Carnation Grower

AVONDALE, CHESTER CO., PA.

Send for price list of Rooted Cuttings.

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

ROOTED CUTTINGS OF

CARNATIONS

All the leading varieties.
Fine stock Buttercup.

CHAS. T. STARR, Avondale, Chester Co., Pa.

CARNATIONS

ROOTED CUTTINGS.

Send for Price List of all the leading varieties.

WM. SWAYNE,
P. O Box 226. KENNETT SQUARE, Chester Co., Pa.

THE NEW WHITE CARNATION

GOV. RUSSELL

A SEEDLING OF 1888.

Will be Distributed Feb. 15, 1893.

Price of Rooted Cuttings: Per 1000, $80; 500 at 1000 rate; per 100, $10; 25 or less, $2 per doz.

ORDERS WILL BE FILLED STRICTLY IN ROTATION.

FOR SALE BY

N. F. McCARTHY & CO., 1 Music Hall Place, Boston, Mass.
C. J. PENNOCK, Kennett Square, Pa.
and E. H. HUNT, 79 Lake Street, Chicago.

PLANTS CAN BE SEEN AT THE ESTABLISHMENTS OF ANY OF THE ABOVE NAMED.

The Following Testimonials tell the Story:

SOUTH SUDBURY, MASS.—The new Carnation, Governor Russell, I consider a grand acquisition to the pink family. It is a pure white with a large flower on a long stiff stem. It is a beautiful shaped plant, and does finely as a pot plant. It does not burst its Calyx, and this is one of the main things in the keeping qualities of a Carnation. It is a great keeper and easy propagator, free blooner and free from disease. JAS. TULIS.

MR. N. F. McCARTHY, Boston. DEAR SIR:—I am pleased to state that after an examination of nearly 1,000 plants of Gov. Russell Carnation I can endorse all that has been said in favor of it. While not the Ideal Carnation, yet I can rank it with the best in cultivation now as regard qualities requisite for a profitable florist flower. As large sized flower as Lizzie McGowan, but of better form and substance, calyx not splitting, a very free blooner, and plants of a remarkably healthy constitution, more so, in fact, than most of the Carnations in cultivation now. Very respectfully yours, DENYS ZIRNGIEBEL.

MESSRS. N. F. McCARTHY & CO. GENTLEMEN:—Your favor of the 5th inst., asking my opinion of the Carnation Gov. Russell, is received. I have seen this Carnation at Reading three times, June, in September and December of the past year. In early June the old plants were a mass of buds and flowers, exceeding anything I had ever seen; the young plants were in field and looked well; in September the plants were being lifted and placed in greenhouses, and had been very severely pinched back—too severely for their good; in December there was a moderate amount of buds and bloom—the plants not having recovered from the heavy topping in early fall. My conclusion is, that one of its parents was Hinze's White, that it is inclined to be late if pinched back more than once in the season, that it is a strong, healthy plant, with robust constitution; the flower is from medium to large, of the Lizzie McGowan type, yet somewhat better in form; it does not burst its calyx, and has a fairly stiff stem. I observed that the lateral flowers were as large as terminals—a very high quality. I have given my opinion, based solely on what I saw the three visits made to Mr. Cumming's place at the times stated.
Yours truly, R. T. LOMBARD.

Orders Booked Now for My Specialties

FOR 1893.

New Jersey.—A scarlet Carnation hard to beat.....$12.00 per 100

Old Rose.—Old rose pink Carnation. .....$12.00 per 100

Nellie Bowden.—Pure bright yellow Canna.....$60.00 per 100

READY IN FEBRUARY.

Other varieties of Carnations, both old and new.

JOHN McGOWAN,
• • • • • • ORANGE, N. J.

CARNATIONS!

Study my WHOLESALE LIST of Rooted Cuttings . . . before ordering. . . .

F. M. PENNOCK,
Bloomfield. Charles Town, Jefferson Co., W. Va.

SEE OUR PRICE LIST

in special carnation number of Jan. 19th, or address

EDW. SWAYNE, Carnationist,
. . . Kennett Square, Pa.

ROOTED CUTTINGS OF
CARNATIONS.
LEADING VARIETIES.
S. J. BUNTING, 58th St. & Elmwood Ave., Phila., Pa.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

CARNATIONS ❋ AHEAD.

You want the best in the market! We have them, 16 Novelties of '93, and all the STANDARD VARIETIES! Send for our complete Price List.

GEORGE HANCOCK, Grand Haven, Mich.

Toronto.

Lent is upon us and dull times may be looked for. Now is the time for the wicked grower to repent of his evil ways last Christmas, and resolve not to do it again at Easter.

The chrysanthemum committee of the G. and F. Association met last week and composed a prize list for the show of 1893, which will be submitted to the regular meeting of the Association this week. Considerable changes have been made and the number of sections greatly reduced. Prizes have been offered for palms in 10, 8 and 6-inch pots, in order to get something to relieve the monotony of the masses of bloom.

Mr. A. J. Watkins, head gardener at the Horticultural Gardens, has had the misfortune to lose his oldest daughter, and is naturally very much cut up over the sad occurrence. Mr. Watkins has the sympathy of all his confreres in his affliction. E.

Tulip La Reine.

Specimens of this tulip were recently received at our office from Klehm's Nurseries, Arlington Heights, Ill. They were very fine flowers, a beautiful pink, with long stems and excellent foliage. This tulip is remarkable for its keeping qualities, outlasting any other variety. Mr. Klehm writes us regarding this tulip as follows: "The demand has been great for them, selling at $5 per 100 straight, and the sales increase every year. The first year that we grew them we raised 500, the next year 2,000, following that 5,000, then 10,000, and this year we have 30,000, but could not fill half the orders for them. Next season we expect to put in 50,000."

Apparently this variety gives more satisfaction than the familiar Cottage Maid; it is a proof that there is still a demand for bulb stuff, when it is first-class.

An Alleged Forger.

The following notice appeared in the daily *Kennebec Journal* of Augusta, Me., February 13, 1893:

"Beware of forger under name of W. S. Rogers. He is a man about 21 years of age, about 5 feet 9 inches in height, weighs 135 to 140 pounds, light hair and light mustache (possibly shaved now), and pleasant address. Claims to represent Pitcher & Manda, Short Hills, N. J. Has been forging checks on New York banks. Arrest and hold and notify. HENRY T. MORSE,
City Marshall, Augusta, Me."

MEECH'S TUBEROUS BEGONIAS.
The Finest Strain in Existence.
For Prices see American Florist for January 26th, 1893.
SEED ALL SOLD.
Catalogue about March 15th.
F. J. MEECH & SON,
Charlevoix, Mich.

1,000,000 TREES —MORE THAN—
Fruit and Ornamental, SHRUBS, VINES, ROSES, etc., in over **1,000 Varieties.**
New and Rare. Old & Reliable. | Send for our Illus. Catalogues.
W. S. LITTLE & CO. ROCHESTER, N. Y. or 15 E. 11th St. N. Y. City

SPHAGNUM MOSS. CLEAN, DRY, FINE.
1 Bale $1.25; 3 Bales $3.50; 10 Bales $10.00.
JOHN A. SALZER SEED CO., La Crosse, Wis.

Always mention the American Florist when writing to advertisers.

BULBS AND TUBERS.

Tuberous Rooted Begonias, Fancy Leaved Caladiums, Crassifolia Gloxinias, Double, Single and Cactus Dahlias.

We offer the following bulbs, largely grown by ourselves, extra fine stocks and first-class in every way. Desirable and salable varieties to be offered in retail circulars and catalogues.

	Per doz.	Per 100
AMARYLLIS Formosissima	$1.00	$ 7.00
Johnsoni	4.00	30.00
Vittata	2.50	20.00
BEGONIAS, Tuberous Rooted, Finest mixed Singles, per 100 $6.00; per 1000 $50.00.		
" " " " Double	1.50	12.00
" " " " Single, Scarlet, Crimson, Yellow, White, Orange and Pink	1.00	7.00
DAHLIAS Pompone, Show Cactus, and Single varieties in fifty finest named sorts, strong ground roots	1.50	12.00
DIELYTRA SPECTABILIS, strong clumps	1.00	6.00
GLOXINIA CRASSIFOLIA in the finest mixtnre, extra selected bulbs	1.50	12.00
First size	1.00	10.00
Second size	.75	8.00
CALADIUMS, fancy leaved varieties in thirty distinct named sorts	2.00	15.00
IPOMEA PANDURATA	.50	4.00
TIGRIDIAS Conchiflora	.50	3.00
Grandiflora	.50	3.00
" Alba	.50	3.00

Orders booked now and reserved until weather moderates or shipment requested.

HENRY A. DREER, 714 Chestnut Street, PHILADELPHIA.

TIME

. . FOR DISTRIBUTION OF . .

NEW CHRYSANTHEMUMS Is near at hand.

Send us a list of your wants and let us make you a price before ordering. Also mention any of the older sorts you require.

NATHAN SMITH & SON,
167 W. Maumee St., ADRIAN, MICH.

New Chrysanthemums.

IRMA—Silver Medal and $50 premium at Cincinnati; also National Certificate; it is among the Pink Chrysanthemums what Mrs. L. C. Madeira is among the Yellow.

ERNST RIEMAN—Mahogany Red. Certificate.

BYNUM SCHILTGES—Dark Red. Certificate.

Above three varieties Strong Plants by mail $2.50. Send for Chrysanthemum List.

H. W. RIEMAN,
Cor. East and Morris Sts. INDIANAPOLIS, IND.
Mention American Florist.

COLEUS AND GERANIUMS

Cuttings and potted plants.
Wholesale and Retail. . . . .
CHAS. A. BAIRD, Manalapan, Mon. Co., N. J

P. SEBIRE & SONS,
Nurserymen, USSY, Calvados, France.

A general assortment of Fruit Tree Stocks such as Apple, Pear Myrobolan Plum, Mahaleb and Mazzard Cherry, Angers Quince. Small Evergreens, Forest Trees, Ornamental Shrubs, Roses, etc. The largest stock in the country. Prices very low. Packing secured. Catalogue free. Send for quotations before placing your orders elsewhere. Agents for U. S, America and Canada.
C. C. ABEL & CO., P. O. Box 920, New York.
Mention American Florist.

Are You a Fruit or Flower Raiser? For Market or Pleasure—

If so, send for our Circular on Fungicides and Insecticides, which are **cheap** and **reliable.** Agents in every State. **Special Fertilizers** for Fruits, Flowers and Vegetables. Agricultural Chemicals. **W. S. POWELL & CO.,**
Chemical Fertilizer Manufrs, Baltimore, Md.
S. F. LEONARD, Seedsman, Agent, Chicago, Ill.

SURPLUS STOCK.

$3.00 per 100. 2-inch pots.

SMILAX, $25.00 per 1000.
PERENNIAL PHLOX, in ten best sorts.
ORIENTAL HARDY POPPY, largest of all.
CISSUS DISCOLOR, $2.00 per 100.
VERBENAS, fine varieties.
PANSIES, large-flowering selected strain.
ROOTED CUTTINGS of Vinca major, Harrisoni, $8.00 per 1000.
HARDY SHRUBS, ten best sorts, $30.00 per 1000.
DOUBLE PETUNIAS, $4.00 per 100.
PALMS, strong 1 year old seedlings, $5.00 per 100. Such as Corypha, Phœnix, Latanias.

For anything in the Florists' line, address

NANZ & NEUNER, Louisville, Ky.

120 page Catalogue free to all; also Wholesale Price List for Florists only.
Mention American Florist.

100,000 MARIE LOUISE VIOLET RUNNERS.

Very healthy. All in cold frame. Free from any disease. The flowers can be seen every day at the store of H. Hession, 246 West 23d St., New York.

Price $5.00 per 1000. Ready April 1.

Order early and mention American Florist.

FD BOULON. Sea Cliff, L. I., N. Y.

New Chrysanthemums.

40 VARIETIES INTRODUCED IN 1892.

Twelve Plants for One Dollar.

Now ready for delivery. Send for Catalogue.

M. B. LITTLE, Glens Falls, N. Y.

GREEN SILKALINE.

FOR STRINGING SMILAX & ASPARAGUS.
Warranted not to Fade.
ALSO ALL KINDS OF BOUQUET THREAD.
JOHN C. MEYER & CO.,
289 Devonshire St., BOSTON, MASS.
When writing mention American Florist.

THE MORNING SUN

Has been a theme of poets' pen and painters' pencil, ever since poets have sung and artists have painted, but never yet has the brilliant sunrise yellow been adequately described or correctly counterfeited. It's beyond comparison, and so is our new Bedding Coleus **Sunrise!** The bright yellow of this valuable acquisition, its sturdy habit, strong constitution, and ability to withstand the August sun, are bound to make **Sunrise** the leading yellow coleus. Rooted Cuttings, $1.00 for twelve. Twenty-five other kinds in quantity. See List!

Alex. McBride,
Alplaus, N. Y.

Siebrecht & Wadley,

ROSE HILL NURSERIES,

NEW ROCHELLE, N. Y.

Palms,
ORCHIDS,
Roses,
and New Plants.

FRESH DRACAENA CANES NOW READY.

ORCHIDS.

The Finest Stock in the World.

SANDER'S,
ST. ALBANS,
ENGLAND.

Thirty minutes from London.

Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City.

E. G. HILL & CO.,

Wholesale Florists,

RICHMOND, INDIANA.

BY THE THOUSAND.

Araucaria excelsa, Aspidistra, Palms, Phormiums, Laurel, Bays, Crowns and Pyramids of all sizes.

Packing free for Cash with order.

THE NURSERIES. JULES DE COCK.
LEDEBERG, near Ghent, BELGIUM.

A Specialty Bulb Begonias, extra vars. at $3 per 100.

ROOTED CUTTINGS. Per 100

Alyssum, double ..... $ .50
" " 4-inch pots 8.00
Ageratum, double, blue or white ..... .75
Heliotrope, blue ..... .75
Carnations, Hinze's White 1.00
Chrysanthemums, Standard sorts; general assortment, labeled 2.50
Special sorts at special prices.
Lium flavum 1.50
" " " 6-inch pots, each 20 cts.
Verbenas, out of soil, in color only, large flowers and distinct colors 1.25
Anthericum vittatum, strong, 4-in. pots, 20c. each
" **picturatum** ..... 20 to 25c. each

TERMS—Invariably cash, or satisfactory reference. No orders filled for less than one dollar.

JOHN CURWEN, Jr.,
(Money Order Office.) VILLA NOVA, PA.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

American Grown Tuberous Begonias.

Why buy inferior strains of imported Tuberous Begonias when you can get American grown tubers of the best quality at equally low prices. It is well known that Griffiin's Begonias greatly surpass all others, and the entire stock of 25,000 were all sold at retail last spring at more than double the prices asked for other strains.

TWO FIRST-CLASS CERTIFICATES.

The Highest Award was given to these Begonias at the recent meeting of the Society of American Florists in Washington.

$6.00 PER 100; $50.00 PER 1000,

For first quality, large tubers in separate colors. This quality is better than imported tubers at the highest price.

DESCRIPTIVE PRICE LIST SENT ON APPLICATION.

MADAM CROZY

and the best of the new Cannas at the lowest prices for first-class stock.

J. WILKINSON ELLIOTT, PITTSBURG, PA.

ROSES AND CARNATIONS.

The Largest and Finest Stock in the Northwest ever offered at the following prices:

ROSES—Perles, Hoste, Sunset, La France, Mermet, Bride, C. Soupert, Niphetos, from 2½-inch pots, $4.00 per 100
Mme. Watteville, Albany, Pierre Guillot, Meteor, from 2½-inch pots ..... 5.00 per 100
American Beauty, from 2½-inch pots ..... 7.00 per 100
CARNATIONS—Silver Spray, Lizzie McGowan, Hinze's White, Hector, Portia, Garfield, Grace Wilder, Fred. Creighton, Mrs. E. G. Hill, from 2-inch pots ..... 3.00 per 100
Rooted Cuttings of all varieties offered ..... 2.00 per 100

Cut Flowers, Roses, Carnations Lilium Harrisii and Smilax at lowest market prices. Telegraph orders promptly attended to. CHRIST HANSEN, Wholesale Florist, ST. PAUL, MINN.

VIOLETS.

MARIE LOUISE RUNNERS

Healthy Stock. Good Plants.

ANDREW WASHBURN,

P O Box 1125. BLOOMINGTON, ILL

CHRYSANTHEMUMS.

ROOTED CUTTINGS.

Lincoln, Ada Spaulding, Domination, L. Boehmer, Rohallion and 20 other good market sorts, $1.50 per 100; Jessica and Ivory, $2.50 per 100. Ready for delivery January 15th.

Address J. G. BURROW,
FISHKILL, N. Y.

DO YOU WANT

ALTERNANTHERAS rooted for $1 per 100; $8 per 1000
Per 100
COLEUS, 2 and 2½-in. pots ..... $ 4.00
GERANIUMS, single red, 2 & 2½-in. pots, mxt. 3.50
" double red, 2 & 2½-in. pots, mxt. 3.50
" in 3 and 3½-in. pots 5.00
BEGONIAS, stock plants, 4 and 5-in. pots... 12.00
Rex and other best varieties.

If so, order soon of the

ELGIN ROSE CO.,
TELEPHONE 8.
519 Chicago Street, - - ELGIN, ILL.

Mention the American Florist when writing to advertisers on this page.

FOR SUMMER PLANTING.

Try them for Bedding Out this coming season.

CRINUMS—Augustum, magnificently attractive; size of bulbs is more or less than 12 in. long, 18 in. in cir. at base, 12 in. at neck. They are now of an age to produce from 1 to 3 flower stalks in a season. The elegant, imposing form of the plant, alone, is worthy of admiration. Price, $2.00 each.
Kirkii, 35c. each, $3.50 per doz., $25 per 100. Smaller size $15 per 100.
Fimbriatum, $8 per 100, $75 per 1000.
Americanum, $2.50 and $5 per 100, $20 to $40 per 1000.
All of the above are objects of great beauty in the garden. Our experience has proven they are valuable for cutting. Try them.
PANCRATIUM—Carribeaum, large, old bulbs which will produce an abundance of snowy blooms. $6.00 per 100.
AMARYLLIS—Longifolia rosea, 6 in. long, 14 in. at base, 8-in. at neck, 75 cts. each.
Zeph. Treatea, $5 per 1000; large lots $4 per 1000.
ANTIGONON Leptopus, nice roots of this beautiful vine, $5 per 100.
CYPERUS Alternifolius, strong roots, 75 cts. per dozen, $5 per 100.
ROSE—Greville or Seven Sisters, 1 year, strong, $6 per 100.
SEED—Zamia Integrifolia, FRESH, native, 75 cts. per lb. by mail postpaid.
☞ Write for Price List.

THE BROOKS SISTERS,
Florists & Bulb Growers, Sorrento, Fla.

VERBENAS

MAMMOTH BEST SORTS, CLEAN, HEALTHY,

$2.50 per 100; $20.00 per 1000.

Rooted Cuttings.....$1.00 per 100; $8.00 per 1000
Pelargonium Fred Dorner. .....$10.00 per 100
Canas, French Tubers..... $5.00 per 100
Alternanthera—P. major, A. nana. .....$3.00 per 100
Fine stock H. P., Tea and Forcing Roses.

JOSEPH HEINL, Jacksonville, Illinois.

Mention the American Florist when writing to advertisers on this page.

Violets.

In No. 245 of the AMERICAN FLORIST, J. H. asks of those having experience in violet growing, what to do to make them bloom.

With healthy, strong plants it would seem as if there should be no mystery in securing bloom. My experience in violet growing is somewhat limited, but have had fair success in growing a crop in each of the past four winters. This winter, from less than 5,000 plants have sold to February 1st, over 100,000 violets. The variety grown is the Marie Louise.

We separate the plants in the latter part of February to one good crown having roots, and pot them in 2-inch pots, and keep them in the houses till well started into growth, when they are removed to cold frames to harden off. They are then planted out in the open ground—in good rich ground,—as early as we would plant hardened plants of early cabbage—usually the first part of April. During the summer they are given frequent cultivation, the runners kept off, and no weeds allowed to grow, so that by fall we secure strong, vigorous plants.

The latter part of September the plants are dug up with good balls of earth attached, and planted on the greenhouse tables, in six inches of good fertile soil, well watered, and nearly every day syringed, and given plenty of air until the latter part of October. We syringe frequently until the weather becomes quite cold, say about December 1st to the 15th, after which time the ground is kept moderately wet by watering between the rows, wetting the foliage as little as possible. As the plants grow, all yellow and dead leaves, and runners and weeds are removed. We keep as near as possible a night temperature of 45° and from 15° to 20° warmer in the day time.

With the above treatment we have never had diseased stock. Any further questions, by those interested, will be answered by addressing,

ANDREW WASHBURN.

Bloomington, Ill.

A NEW MUSHROOM

Mushroom Culture at the Doors of Everyone.

This new mushroom, obtained by Boulon, Florist, is the only one that has supplied the New York market and Delmonico from June until the end of Oct., 1892, daily.

Spawn offered for sale from March 15 in baskets of 5 lbs. Each shipment will be accompanied with directions for care and culture.

PER BASKET $5.00, CASH WITH ORDER.

Write for price on larger lots. I decline to send C. O. D.

ED. BOULON,
Sea Cliff, L. I., N. Y.

CANE PLANT STAKES

The Best and Cheapest Stake.

Price, 5 to 6 ft. long, $4.50 per 1000. Freight prepaid within 500 miles on lots of 1000 or over. Send cash with order.

F. WALKER & CO.,
641 4th Ave., LOUISVILLE, KY.

When writing to any of the advertisers on this page please mention the American Florist.

F. & O. T. S. R. V. P. B. S.

Stand for Fruit and Ornamental Trees, Shrubs, Roses, Vines, Plants, Bulbs, Seeds. One of the very largest and best assortments in the U. S.

SPECIAL SURPLUS

In Fruits, Apple, Standard and Dwarf Pear, Plum, Peach, Grape Vines, Small Fruits, etc.
In Ornamentals for Lawn, Street and Park Planting, Ash, Alder, Balm of Gilead, Birch, Beech, Catalpas, Elms, Maples, Magnolias, Oaks, Poplars, Salisburias, Tulip Trees, Willows, etc.
In Evergreens, Arbor Vitæ, Box, Cupressus, Firs, Junipers, Pines, Rhododendons, Retinisporas, Spruces, etc.
In Shrubs, Altheas, Berberry, Cornus, Corcorus, Calycanthus, Deutzias, Forsythea, Fringe, Hydrangea, Honeysuckle, Lilac, Privet, Spireas, Syringa, Weigelia, etc.
In Climbing Vines, Ampelopsis, Bignonia, Clematis, Honeysuckle, Ivy, Wistaria, etc.
In Roses and Plants, In extensive assortment; of the former we grow three-fourths of a million, of the latter millions, a year. For more complete assortment send for Trade List, free to Nurserymen, Florists and Dealers.

39 YEARS. 28 GREENHOUSES. 900 ACRES.

THE STORRS & HARRISON CO., Painesville, Lake Co., Ohio.

100,000 VERBENAS.

THE CHOICEST VARIETIES IN CULTIVATION.

Fine pot plants, $2.50 per 100; $20 00 per 1000 Rooted Cuttings, $1 00 per 100; $8 00 per 1000.

NO RUST OR MILDEW.

Packed light, and satisfaction guaranteed. Send for circular. . . .

Our sales reached nearly 250,000 last year, and we can assure our customers that our plants are fully equal, and assortment of varieties surpass those of last year.

J. L. DILLON, Bloomsburg, Pa.

Rooted Cuttings

of Evergreens, Hardy Flowering Shrubs and Hardy Perennials (Achillea, iberis, etc.) raised on contract for spring delivery. SEND LIST OF WANTS.

. . . *ISAAC C. ROGERS, MOORESTOWN, N. J.*

Magnolias.

IN VARIETY.

Cydonia Japonica.

ALL SIZES FOR HEDGING BY THE 1000.

Eulalias.

4 VARIETIES.

Send for wholesale price list of all kinds of hardy ornamental stock.

SAMUEL C. MOON,
Bucks County, MORRISVILLE, PA.

Association "Flora"

BOSKOOP, HOLLAND.

Now on hand in New York:
CLEMATIS, 3 Years, per 100, $30.00
H. P. ROSES, for forcing, " 9.00
In the best variety, as Alfred Colomb, Anna de Diesbach, B. Rothschild, Fisher Holmes, Gen. Jack, La France, Mme. G. Luizet, Mme. Plantier, Magna Charta, Paul Neyron, P. C. de Rohan, Merville de Lyon, Perle des Blanches, Ulrich Brunner and other sorts. Azaleas, Rhododendrons, Spiræas, etc. We also have Palms, Dracænas, Arancarias and Bay Trees at our nurseries in Holland. Catalogue on application.

P. OUWERKERK, 206 Cambridge Ave.,
JERSEY CITY, N. J.

NOVELTY FOR 1893!

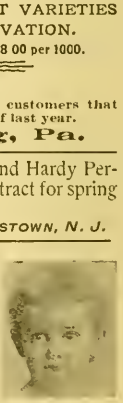
Variegated Hop.

(ROEMER'S.)

Most ornamental and fast growing Climber. Descriptive list, as well as of other EXTRA CHOICE FLOWER SEEDS free on application.

FRED. ROEMER, Seed Grower,
QUEDLINBURG, GERMANY.

CUTS!



Wood Engraving,
Zinc Etching,
Half-Tone,
Wax Engraving, Photo-Engraving,
Designing.

MANZ & CO.,
183 Monroe Street, CHICAGO. ENGRAVERS.

Kills Mildew and Fungus Growth. What does?

GRAPE DUST.

Sold by Seedsmen.

No Trees of 1st quality can ever be sent by mail. Mayhap you know it. By freight, prepaid if preferred, we ship safely 4, 5, or 6 ft. trees; 2-yr. Roses of rare excellence—everything! You actually pay less than for the puny stuff. 1,000 acres Nurseries. 20,000 acres Orchards. Exact information about trees and fruits. Stark Bros., Louisiana, Mo.

CANNAS

CHRYSANTHEMUMS.

Lowest Prices for Choice Stock. List Free.

T. H. SPAULDING, Orange, N. J.

TUBEROUS ROOTED BEGONIAS.

Best selling stock for Retail Florists. Order now and start into growth for early sales. Sell like hot cakes when in bloom. Try them if you never have. If you have, then you know it. In large quantities; choicest quality.

SINGLE, in 5 separate colors, white, yellow, scarlet, pink and crimson.....$6.00 per 100; $50.00 per 1000.
DOUBLE, in 5 separate colors.....$16.00 per 100. (Can be mailed for 30 cts. per 100.)

F. R. PIERSON COMPANY, TARRYTOWN ON THE HUDSON, NEW YORK.

FOR **Florists, Nurserymen & Seedsmen**

GEM STEEL GEM WIND ENGINE AND GEM STEEL TOWER

The **GEM ENGINE,** when furnished with Graphite Bearings, requires no oiling, no climbing of towers, no hinged or frail-jointed towers and practically **no attention,** yet is more durable than other Wind Motors that require all this, and more unique in finish. The **GEM TOWER** combines beauty, strength, durability, simplicity to the greatest extent and has no equal. Both are manufactured and guaranteed by the oldest and most reliable Wind Mill Company in existence, and who build the **Halladay Standard Pumping** and **Geared Wind Mills,** the **Standard Vaneless** and **U. S. Solid Wheel Wind Mills,** Pumps, Tanks, Horse Hay Tools, &c. No other company offers equal inducements. Send for Catalogue and Prices.

U.S. WIND ENGINE & PUMP CO.
BATAVIA, ILL., U. S. A.

BRANCH HOUSES: Omaha, Neb.; Kansas City, Mo.; DEPOTS: Boston, Mass.; Ft. Worth, Tex.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

Clear Cypress, from bottom gutter up is my specialty.

Lyman Felheim,
ERIE, PA.

Mention American Florist.

J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS •

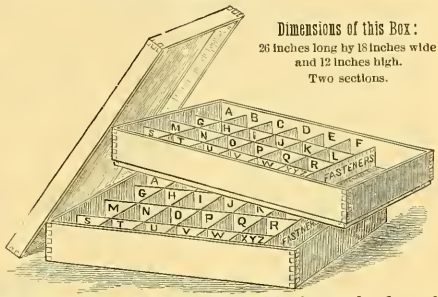
Greenhouse Material,

LOUISVILLE, KY.

THE EMERSON **PATENT BINDER.**
Price postpaid 75 CENTS.
Address American Florist Co. CHICAGO.

Showing the appearance of the Binder when quite full of THE American Florist. Every subscriber should have one.

(COPYRIGHTED)



Dimensions of this Box: 26 inches long by 18 inches wide and 12 inches high. Two sections.

With an order for 500 letters, we furnish a box made of wood nicely stained and varnished, such as is represented in the cut.

BOSTON FLORIST LETTER CO.

Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1½-in. and 2-in. 2.00 per 100. Patent fastener with each letter.

OUR NEW SCRIPT LETTER, $4.00 per 100.

N. F. McCARTHY, Treas. & Mangr. | Address 13 Green St., **Boston, Mass.**

Address all correspondence to 1 Music Hall Place.

We have a new **FASTENER** which we consider a decided success. Any customers having old style fasteners which they wish to exchange, can do so without additional cost by writing us.

AGENTS:
Marschnetz & Co., 25 N. 4th St., Phila., Pa
A. Roiker & Sons, New York.
F. E. McAllister, 22 Dey St., New York.
A. D. Perry & Co., 33 Warren St., Syracuse, New York.
E. Kaufman, Philadelphia, Pa.
H. Bayersdorfer & Co., Philadelphia, Pa.
A. C. Kendal, 115 Ontario St., Cleveland, O.
J. A. Simmers, Toronto, Ont. Agent for Canada.
E. H. Bunt, 79 Lake St., Chicago, Ill.
Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.
H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O.
T. W. Wood & Sons, 6th and Marshall Sts. Richmond, Va.
Jas. Vick's Sons, Rochester, N. Y.
C. A. Kuehn, 1122 Pine St., St. Louis, Mo.

These Letters are handled by all the Wholesalers in Boston.

Pat. 188z, '85, '86, '88, '90, '91.

FOR WATER, AIR, STEAM, ACIDS, OILS, LIQUORS, GAS, SUCTION,
And for any and every purpose for which a hose can be applied.
Sizes, ½-inch to 42 inches diameter.
The making, vending or use of any Serviceable Armored Wire Bound Hose not of our manufacture is an infringement on one or more of our Patents. The rights secured to us render each individual dealer or user responsible for such unlawful use with all the consequences thereof. For prices and discounts address **WATERBURY RUBBER CO.,** Sole Mf'rs and Owners of all the *Sphincter Grip Armored Hose Patents,* 49 Warren Street, New York.
J. C. VAUGHAN, Agent, CHICAGO.

ESTABLISHED 1866.

FLORISTS WIRE DESIGNS

MANUFACTURED BY

N. STEFFENS
335 EAST 21ST ST. NEW YORK.

Mention American Florist.

PLANT BED CLOTH.
CHEAP SUBSTITUTE FOR GLASS on Hot-beds, Cold Frames, etc. Three grades.
Light, Medium, Heavy.

Used by Florists, Gardeners, etc., invaluable for Tobacco Growers. Protects from frost. Promotes hardy, vigorous growth and keeps beds warm; will not shrink or mildew. For sale by the leading Dry Goods houses, Seedsmen, Florists, etc. Well known and extensively used. For circulars and samples apply

NATIONAL WATERPROOF FIBRE CO.,
50 South Street, - - NEW YORK.
Agents Wanted.
Mention American Florist.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.
JOHN G. ESLER, Sec'y F. H. A., Saddle River, N. J.

Always mention the American Florist when writing to advertisers.

YOU CAN SAVE MONEY BY PURCHASING, AND GLASS BY USING
Hamilton's Patent Sash Lifter.
The best thing of the kind ever invented, for either high or low greenhouses. Send for description and price list.
BAY STATE HARDWARE CO.,
72 Freeport St., BOSTON, MASS.

BOXES. BOXES. BOXES.
Three-Piece Wood Mailing Box.
The neatest and strongest box on the market. Send 15 cts. in stamps for sample nest and price list. I also make Cut Flower and Express Boxes.
W. E. SMITH,
Successor to SMITH & SMITH,
Hardin County. KENTON, OHIO.

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

Milwaukee.

There was a lively demand for flowers the week before Lent. C. B. Whitnall introduced a new feature for this city Feb. 14, by displaying a window and case full of "Floral Valentines;" they were packed and delivered by special messenger as soon as sold. They were made of choice boxes in shades of pink, yellow, and blue, with delicate bouquets of flowers to match in color tied with ribbon and fastened inside. Flowers used were violets, valley, forget-me-nots, roses, trumpet majors, etc. They went off like hot cakes.

Another display in their window attracted attention and was much admired; it was a vase of Edna Craig carnations. Any grower who stood by and heard passers by comment on this vase of flowers would not hesitate in doing all in his power to grow this variety. This is the large flower, beautiful color and strong stem the public want. C. B. W.

To Heat a Mushroom Shed.

How many runs of 1¼-inch steam pipe is sufficient to heat a mushroom shed 50x20? OHIO.

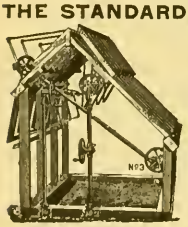
The temperature to maintain is 55° to 60°. While 55° is right better be able to run a little higher if need be. As the position, height or manner of construction of shed are not given no one can tell the amount of pipe required. Figure out the number of cubic feet of space to be heated and submit the question to a steam fitter. F.

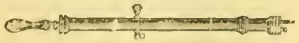
THE BEST POTS.
THE CHEAPEST.
THE LOWEST FREIGHT RATES.
THE BEST OF PACKING.
THE LARGEST POTTERY IN THE STATE FOR MAKING STANDARD FLOWER POTS.

PRICE LIST OF POTS.

	Per 100		Per 100
2 inch	$3.25	6 inch	$2.20
2¼ "	3.50	7 "	3.50
2½ "	4.00	8 "	5.00
3 "	5.00	9 "	7.50
3½ "	7.25	10 "	10.00
4 "	9.00	11 "	15.00
5 "	13.80	12 "	20.00

Terms: Cash, free on board cars here. Address
HILFINGER BROS., Potters
FORT EDWARD, N. Y.
Mention American Florist.

THE STANDARD Ventilating Machines

Received best awards at
BUFFALO, N. Y., BOSTON, MASS., TORONTO, ONT.
Send for Catalogue and prices.
E. HIPPARD,
Youngstown, O.

STOTT'S SYRINGE.

Read Advertisement in next week's issue.

THE GREAT ANTIPEST.
For particulars, see next week.
R. W. CARMAN, GEN'L AGT.,
291 Amity Street, FLUSHING, Queens Co., N. Y.

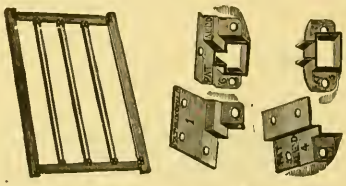
"Standard" Flower Pots.
As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address
The Whilldin Pottery Company,
BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.
Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.
A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.
We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.
SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY,
Manufacturing the
ELVERSON, SHERWOOD & BARKER
STANDARD FLOWER POTS.
Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bud Pots, etc.
ADDRESS PITTSBURGH CLAY MF'G CO., New Brighton, Pa.

H. M. HOOKER COMPANY,
57 and 59 W. Randolph Street, CHICAGO,
NATURAL GAS MADE GLASS
FOR GREENHOUSES.
Write for latest prices.


GARDENERS HOT-BED SASH.
INDESTRUCTIBLE.
CYPRESS GREENHOUSE WOOD WORK OF ALL KINDS.
Write for prices.
THE PEIRCE & COLEMAN CO.,
Dayton, Ohio.
J. C. VAUGHAN, Agent for Chicago and New York.

U. S. AND FOREIGN PATENTS Trade Marks, Designs, Opinions, Searches, &c., promptly attended to. Send sketch or model for free examination as to patentability. All work strictly confidential.
GEO. H. CHANDLEE,
Atlantic Building, WASHINGTON D.
Mention American Florist

Please mention the American Florist every time you write any of the advertisers on this page.

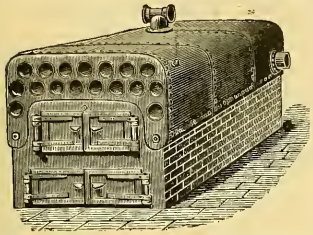
W & C.Co. LIMITED
Wrought Iron Pipe, Fittings, Valves, ETC.
78 JOHN ST., NEW YORK.
WELLS & COUTAN CO., L'td.
Mention American Florist.

ESTABLISHED 1854.

DEVINE'S BOILER WORKS.

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers

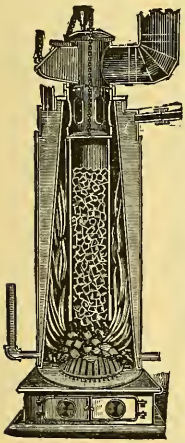


Capacity from 350 to 10,000 feet of four-inch pipe.
SEND FOR NEW LIST.

FRANK DAN BLISH, Att'y,

OFFICE, 189 STATE STREET.
WORKS, 56th & WALLACE STREETS.
CHICAGO.

Mention American Florist.



THE WILKS HEATER,

FOR HEATING

GREENHOUSES, STORES, DWELLINGS, ETC.

Manfactured by THE S. WILKS MF'G CO. 123 S. Clinton St., CHICAGO, ILL.

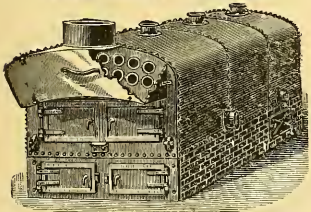
SEND FOR CATALOGUE.

KROESCHELL BROS.

IMPROVED

Greenhouse Boiler,

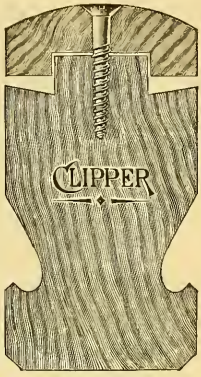
41 to 55 Erie St., CHICAGO.



Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around (front, sides and back). Write for information

FLORAL DESIGNS

The Cut Flower Worker's friend. Fine book of 160 pages. Send $3.50 for it, to
HORACE McFARLAND, Harrisburg, Pa.



Mention American Florist.

THE "LOCKLAND"

Sash Bars

ARE ALWAYS SATISFACTORY.

This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.

GUTTER MATERIAL, RIDGES, SASH, ETC.

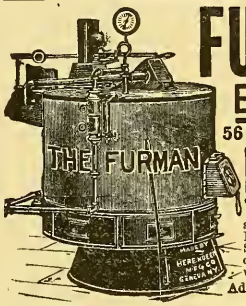
The finest CLEAR CYPRESS used.

Write for circulars and estimates.

LOCKLAND LUMBER CO.

Lockland, O.

Mention American Florist



FURMAN BOILERS

Economical — Substantial — Safe.

56 STYLES AND SIZES—BURNS HARD OR SOFT COAL.

Modern Hot-Water Heating

These Boilers have a high reputation for Staunchness, Durability and Safety, and are GREAT COAL SAVERS. Minimum Friction and Maximum Velocity only obtained by VERTICAL WATER CIRCULATION. Send for new 150-page book giving full particulars and a great deal of valuable information on modern Heating and Ventilation, with plans and tables for correct hot-water work. Mailed free.

Address HERENDEEN MFG. CO., 26 Vine Street, GENEVA, N. Y.

RIDER

Do You Want A RELIABLE SUPPLY OF **WATER**

For Your GREEN HOUSE, ROSE HOUSE, NURSERY, Conservatory, Lawn, House, Garden, Stock or any other purpose, WITHOUT EXPENSE OF TIME OR LABOR?

All of this can be accomplished by using the Improved RIDER OR ERICSSON **HOT-AIR PUMPING ENGINE**

ERICSSON

Catalogue with full particulars, sent on application.

DE LAMATER IRON WORKS, 21 CORTLANDT ST., NEW YORK, N.Y.

D. H. ROBERTS,

159 & 161 S. Fifth Ave., NEW YORK,

NATURAL GAS MADE GLASS

for ROSE HOUSES, CONSERVATORIES, Etc., Etc.

Our Glass received the Highest Award at the Boston Convention of the S. A. F

FIRST-CLASS CERTIFICATE OF MERIT.

PERFECT DRAINAGE **BENCH TILE** • Used by all the leading Growers and Horticultural Builders.

For testimonials, circulars, etc., address W. P. WIGHT,

UPLAND GREENHOUSES, : : : MADISON, NEW JERSEY

GREENHOUSE HEATING

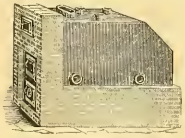
AND VENTILATING.

Superior Hot Water Boilers.

JOHN A. SCOLLAY,

74 & 76 Myrtle Ave., Brooklyn, N.Y.

Send for Catalogue.



GREEN-HOUSE HEATING.

MYERS & CO.

1518 & 1520 S. 9th St., PHILADELPHIA.

Send for catalogue and price list.

Mention American Florist.

Index to Advertisers.

Abel C C & Co.....746
Adv Rates, etc.....740
Anchorage Rose Co....738
Asmus Ernst.....739
Baird Chas A.....746
Baller F A.....742
Barnard W W & Co....742
Bay State Hdw Co....749
Bayersdorfer H & Co..740
Baylis Henry W.....741
Berger H H & Co.....743
Bonsall Jos E & Sons..741
Boston Letter Co.....749
Boulon F.....746 748
Braeudlein M.....738
Brague L B.....740
Brauer & Richter.....744
Brooks Sisters.....742
Bunting S J.....745
Burns & Raynor.....741
Burpee W Atlee & Co..742
Burrow J G.....741
Burton John.....739 742
Carman R W.....750
Carmody J D.....752
Chandlee Geo F.....750
Chicago Cut Flower Ex 749
Chitty H E.....744
Clark B L.....744
Cliffe David.....739
Connelly John J.....736
Corbrey T J & Co.....741
Curwen John Jr.....747
Dallas John.....738
De Cock Jules.....747
Denver City Nurseries.736
Devine's Boiler Wks...751
De Lamater Iron Wks.751
Dillon J L.....748
Dreer H A.....743 746
Elgin Rose Co.....747
Elliott J Wilkinson....747
Elliott W H.....740
Ellison Wm.....740
Evans Charles F & Bro.739
Faust H G & Co.....743
Felheim Lyman.....749
Field S B.....742
Gardiner J & Co.....742
Gibson J C.....744
Hall Ass'n.....749
Hammond Benj.....748
Hancock Geo.....745
Hansen Christ.....747
Hart James.....741
Hart Michael A.....741
Hartford H E.....740
Heinl Jos.....747
Herendeen Mfg Co.....751
Herr Albert M.....744
Hews A H & Co.....750
Hillinger Bros.....750
Hill E G & Co.....747
Hippard E.....739 750
Hitchings & Co.....752
Hooker H M Co.....750
Horan Edw C.....741
Horne James.....751
Hulsebosch Bros.....743
Hunt E H.....741
Hunt M A.....738
Hunter & Purdy.....741
Irvine John Co.....736
Jennings E B.....744
Joosten C H.....742
Kaufmann Ernst & Co.740
Kennicott Bros.....741
Koffman E.....749
Kroeschell Bros.....751
Kuehn C A.....740
Kuhl Geo A.....744
Larkin Isaac.....744
La Roche & Stahl.....739 74
Little M B.....746
Little W S & Co.....746
Lockland Lumber Co...751
Lombard R T.....745
Long Dan'l B.....740
McBride Alex.....747
McCarthy N F & Co....741
McFarland J H.....751
McFarland J H Co.....745
McGowan John.....745
Manz J & Co.....748
Marschuetz & Co.....740
May John N.....742
Meech F J & Son.....746
Mendenhall R J.....736
Meyer John C & Co.....746
Michel Plant & Bulb Co 743
Milling Bros.....747
Moffatt G J.....743
Moninger Jno C.....752
Moon Samuel C.....748
Moore Frank L.....739
Myers & Co.....751
Nagel E & Co.....744
Nanz G.....742
Nanz & Neuner.....739 746
National Fibre Co.....749
Niles Centre Floral Co.741
Olson M.....747
Ouwerkerk P.....748
Peck & Sutherland.....741
Pelree & Coleman Co..740
Pennock C J.....744
Pennock F M.....745
Pennock Sam'l S.....741
Pierson F R Co.....737 749
Pillsbury I L.....742
Pittsburg Clay Mfg Co.750
Powell W S & Co.....746
Randall A L.....741
Renard Joseph.....744
Rickson H W.....746
Rinehand Benj.....745
Roberts D H.....751
Roehrs Theo.....741
Roemer Fred.....748
Rogers Nurseries.....748
Rolker A & Sons.....743
Russell Governor.....745
Russell S J.....740
Sulter Bros.....738
Salzer John A.....746
Sander & Co.....747
Schulz Jacob.....738
Scollay John A.....751
Sebire P & Sons.....746
Shelmire W R.....745
Sheridan W F.....741
Sherwood Hall Nur.....745
Siebrecht & Wadley....747
Siptle Dopffel & Co....750
Situations wants.....738
Smith C A Floral Co. 741
Smith Nathan & Son...746
Smith W E.....749
Spaulding T H.....748
Spooner Wm H.....738
Stark Bros.....738 748
Starr Chas T.....745
Steffens N.....749
Storrs & Harrison Co 738 748
Stott Garden Imp Co..750
Strauss C & Co.....738
Struck J N & Bro.....749
Styer J J.....744
Sunderbruch H L.....740
Swayne Edw.....745
Swayne Wm.....745
Tricker Wm.....743
U S Wind Engine & Pump Co.....749
Vaughan J C.....743
Walker F & Co.....748
Washburn Andrew.....747
Waterbury Rubber Co.749
[illegible] B M.....743
[illegible].....745
[illegible].....741
[illegible].....746
Wilks S S.....[illegible]
Winter N D.....[illegible]
Wisconsin Flower Ex.....736 743
Wood Bros.....745

Goodell Hll
Mass Agri Col
Dec 15 93

YOU CAN never invest $2 to better advantage than in a copy of our new trade directory and reference book.

CYPRESS GREEN HOUSE MATERIAL

CLEAR CYPRESS SASH BARS

HOT BED AND VENTILATING SASH

JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

HITCHINGS & CO.

ESTABLISHED 1844.

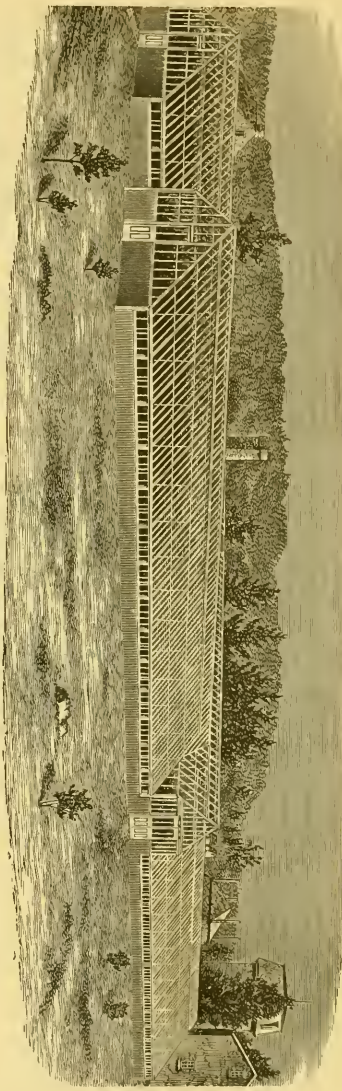
GREENHOUSE HEATING AND VENTILATING,

HORTICULTURAL ARCHITECTURE AND BUILDING.

COMMERCIAL ROSE AND GREENHOUSES, CONSERVATORIES, PALM HOUSES, ETC., CONSTRUCTED WITH POSTS, RAFTERS, PURLINS, GUTTERS, SILLS, COLUMNS AND BRACKETS, ALL OF IRON; AND GLAZING BARS, VENTILATING SASH AND SIDING OF WOOD. ERECTED COMPLETE, OR THE STRUCTURAL IRON WORK SHIPPED READY FOR ERECTION WITH PLANS, DETAILS AND FULL INSTRUCTIONS TO ENABLE LOCAL MECHANICS TO COMPLETE THE SAME. ——) IRON BENCH FRAMES FOR SLATE OR WOOD TOPS. (——

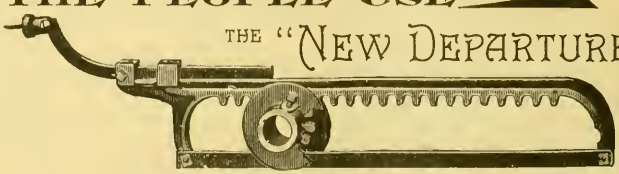
SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUES.

HITCHINGS & CO., 233 Mercer Stre[illegible] NEW YORK.



Mention American Florist.

THE PEOPLE USE THE "NEW DEPARTURE"



SEE WHAT THE PEOPLE SAY:

RUXTON, BALTIMORE CO., MD.

J. D CARMODY, Evansville, Ind., *Dear Sir:*—Enclosed find check for $50.00, amount of your bill. I have put up the Ventilating Apparatus, and it works well. It certainly is easily put up and light, though solid and strong enough for the work, which, by the "New Departure," is made a good deal lighter, as only the actual weight of the Ventilators is on the Apparatus. I shall want some more in a short while.

THEO. ECKARDT & CO.

J. D. CARMODY, Evansville, Ind.

Mention American Florist.

THE AMERICAN FLORIST

A WEEKLY JOURNAL FOR THE TRADE

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, MARCH 2, 1893.** **No. 248**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company.
Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,

322 Dearborn Street, CHICAGO.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis, Mo., August 9 to 12, 1893.

CONTENTS.

Our telephone 753
Propagation of stove house plants 754
The new palm house at Lincoln Park (illus) . . 754
Miscellaneous seasonable hints 756
A new chrysanthemum fungus (illus) 756
Leaf spot of chrysanthemums 756
Sweet peas for cut flowers 757
Carnations—A retailer's views 758
—Temperature for carnations 759
—Echoes from the Pittsburg meeting 759
Spring flowering plants 759
Washington 760
New York 761
Chicago 761
Philadelphia 762
St. Louis 762
Chrysanthemum Niveus (illus) 763
Mushrooms 764
The seed trade 768
News notes 768
Eucharis amazonica 770
Crude oil for fuel 772
Carnations in California 774
Toronto 776
Baltimore 778

IF YOU have not already ordered a copy of our directory and reference book you are missing a good thing that you ought to have. Remember that it contains not only a list of those in the trade but a vast amount of reference matter of great value to every reader of the FLORIST. The reference lists of roses, chrysanthemums and carnations are alone worth the price of the book.

THE NEXT of our series of special numbers will be devoted to the rose, the "Queen of Flowers." It will be issued about March 30 and will take the place of our usual special spring number. We shall make this issue even handsomer than any of the special numbers yet issued and will spare no expense to make it worthy of the flower to which it will be mainly devoted.

IN LAST ISSUE a typographical error in the advertisement of Mr. Jno. J. Connelly, made him offer "clematis" when it should have read "carnations." The advertisement is correct in this issue.

WHEN writing our advertisers please use one of your printed business letter heads or enclose your business card.

Our Telephone.

"Hello there, is that J. M. Keller?"

"Yes."

"Just the man we are after. How's Bay Ridge? Any Easter plants out in that famous locality?"

"Yes, a few."

"Well, now that Lent is already with us the cry will soon go up over the land 'What are you going to have.' Perhaps you can give us an idea of what there is to look forward to. What have you in the way of novelties in Easter plants this year?"

"Nothing worth speaking of. There is not much variety in Easter stuff and it is mighty hard to introduce anything new that will take. Everything at Easter must be done in a rush. If anything soft or delicate were grown it would be lost. The retailers don't have time to bother with stuff that requires careful handling at such a time. We are growing some Callistemon speciosus—'Bottle Brush' it is commonly called. This is somewhat of a novelty although we had a few in the market last year. But it is not a thing to be grown in very large quantities, for the simple reason that we can't get the stock. The great bulk of Easter plants this year will be as in former years, azaleas, cytisus, lilies, daisies, hydrangeas, spiræas, and of course palms and foliage plants. Azaleas I believe give more satisfaction than anything else."

"What is your treatment for azaleas?"

"Our method does not vary greatly from that pursued by the other large growers about here. We import in October. As soon as received we pot them, keep them moderately damp and as cool as the weather in fall will permit. During winter our treatment varies somewhat according to what time Easter is to come and according to variety. You cannot have Deutsche Perle, for instance, for Easter unless you keep it quite cold. Some varieties, like Souvenir de Prince Albert must have quite a strong heat to bring them in. We try to keep our houses in winter, on an average, as near 40° at night as we can, and say 10° higher during day time."

"How do you handle them after they are through flowering?"

"When they are through flowering I keep them cool till say middle of May and when there is no more danger of frost plant them right out doors in the full sun. That is something, though, that I cannot recommend for every soil. Our soil is light. Some soil has lime in it, and azaleas don't seem to like lime. We mulch them and keep them well watered. Rotten manure can be used for the mulching, although that is contrary to old traditions. We used to think that azaleas couldn't stand manure, but they will."

"If you wanted to grow but a dozen varieties or so of azaleas for Easter what sorts would you select as the best?"

"For white I would take Raphael, Bernhard Andreas alba and Flag of Truce. Deutsche Perle might be included but it is too early a bloomer for a late Easter. For light pink or salmon I would take Emperatice des Indes, Vervæneana and M'lle Louise de Kerchove, and for bright rose Mme. Van der Cruyssen, Simon Mardner and Dr. Moore. Emperatrice des Indes I would rather have than Vervæneana, I don't say that it's a better flower but it makes a better plant. The habit is better. Scarlet is not a color that takes well but if you want a few, Cocarde Orange or Jules Van Loo will do, and for variegated take Mme. Camille Van Langenhove but you don't want many variegated ones."

"Are double or single the most satisfactory."

"Double and semi-double. The varieties I have mentioned are almost all double."

"How do you handle genistas for Easter?"

"We take cuttings about March. They strike very readily. Genistas I keep under glass all the year round, no shade, and plenty of air night and day as soon as the weather permits. Of course they take plenty of water by this treatment. In order to give them the globular shape which we always have them in we cut their hair once a month, that is we take sheep shears and clip them. In winter we give them the same general treatment as we do azaleas. The only difference is that they require plenty of room. If crowded as you can crowd azaleas they rot. The foliage is so dense that they are bound to damp if set too close. You cannot help it. As to soil they are not particular. Any good potting stuff only you must not use bone. Genitas will not stand it, although they will stand other manure."

"Do you grow any of the old canariensis now?"

"No, racemosus is the only one we propagate. When Easter is over our city florists have a habit of throwing their old plants into the first florist's wagon that comes along. In that way we get a few of the old sort mixed in, but you don't find any in our young stock.

"Kalmia latifolia makes a mighty pretty plant when in flower We shall have some of those for Easter. The treatment is precisely the same as for azaleas."

"Where do you get your kalmia plants?"

"Import them. We cannot afford to grow them here. It takes too long."

"How about the ardisias?"

"These are grown here from seed. They are pretty small the first year and it is the third year before they bear any berries to amount to anything. The second year they might be planted out in frames and shaded and kept well watered, then potted carefully in the fall. Ardisias will stand a pretty good temperature. In winter anything between 50° and 60° will do They are very apt to be infested with

scale, and frequent syringing is required to keep them clean."

"Do you grow longiflorum or Harrisii lilies for Easter plants?"

"For Easter we prefer longiflorum. As a plant they will take longiflorum in preference to Harrisii every time if they can get them. But the bulbs have been pretty scarce lately. As to growing lilies and hydrangeas I cannot tell you anything. Everybody grows them.

"There is not much for us in spiræa. But we all think we ought to have it. I suppose if we didn't have it we could get along just as well without it. We sell a great many daisies—marguerites they call them in Boston—for Easter decorations and in fact all winter through. For these we take the cuttings anytime from March to July. Our earliest struck ones are all sold already. Those that we shall have for Easter were put in about May or June. We shall have a few roses, mostly Magnas. Outside of what I have mentioned we grow nothing in quantity except palms, pandanus, araucarias, etc. The pandanus I find does not sell this year equal to last year."

"What palms do you find mostly in demand this season?"

"Arecas, kentias and lantanias mainly. The latanias have out sold all the others this year. Rhapis is not so showy a palm as the others. There is not so big a demand for it. One reason is that it is too expensive. We import all our rhapis. It is of too slow a growth to raise it from seed here."

"Much obliged to you, Mr. Keller. Have some nice plank walks laid from your place to the station and we will come out and see those plants just before Easter."

Propagation of Stove House Plants.

BY E. ASMUS, SHORT HILLS, N. J.

[Read before the New York Florist Club, on Monday, February 13th, 1905.]

Any method by which plants are increased, whether by seed, cuttings, layers, bulbs or division, is applicable under the head of propagation.

Many are the devices adopted in the stove propagating house to maintain a moist and even temperature. The one mostly in use is the propagating frame, which is of very simple construction, being merely a box-like structure with either sliding or hinged sash. No matter how the frame may be constructed, it should be sufficiently tight so as to be able to control both heat and moisture, and also allow ventilation. These frames as a rule are built right on the greenhouse benches, with hot water or steam pipes running underneath to supply the necessary bottom heat, which should range from about 75° to 80°. The bottom of the benches should be boarded up and provided with slides that can be opened and closed, so as to better regulate the temperature when heavy firing has to be done, otherwise the sand or material in which the cuttings are placed becomes too dry, causing them to wilt, and sometimes resulting in their loss. Great care must therefore be taken that the cuttings never become wilted, or they will take twice as long to root, and in some cases will never again recover. Great discretion must also be used in watering, never using cold water, always using that from which the chill has been taken, or of the same temperature as the house. If cold water is used the result is sometimes disastrous, at times causing the loss of an entire batch of tender plants.

Ventilation is another one of the essential factors in successful plant propagation. The frames, after having been closed all day, should be open in the evening, so as to allow the condensed moisture, which has generated on the glass, to dry off before closing them again. The frames should not be closed entirely, always leaving a crack through which air may pass on the frame at night. Repeat the same operation in the morning, keeping the frames closed down tight in the day. Continue this process until the cuttings you have in the frame have become thoroughly rooted, when the frame should be left open so as to allow the cuttings to become hardened off before potting.

There are different methods by which many of the numerous stove house plants are increased, some by cuttings, some by division, and others by layers.

The dracæna, one of our most useful stove house plants, is readily increased by cutting up the stems in lengths of four or five inches, or longer if desired, the small pieces being much more advisable if properly cut so as not to injure the eyes. These should be placed on a bench or in flats in sand, or sphagnum moss, in some warm place in a propagating house, where they will receive some bottom heat. In a short time these will begin to throw up small plants, which should be taken off as soon as large enough and placed in a propagating frame, where it will not take them long to root. Great care must be taken in potting up the rooted cuttings, so as not to break the roots, which are very brittle, and if broken are apt to cause the bottom leaves to become yellow, thus making an unsightly plant to begin with.

Marantas, another class of fine decorative plants, are mostly propagated by division of the rhizomes. These are split into small pieces, the tops being cut off and the divided pieces laid in moss, and placed in the propagating house on bottom heat. In a short time the dormant back eyes will begin to throw up small plants which should be left until they have several leaves. When in this state the small plants can be cut off and potted. The rhizomes should be placed back again, and will keep on producing small plants as long as there are any sound eyes remaining.

Dieffenbachia, a fine decorative stove plant of many varieties, is increased by cutting up the stem of the plant to single eyes. The pieces should be left to get dry for a time after cutting, when the ends should be dipped in slacked lime to keep them from rotting. The pieces should then be placed in sphagnum moss, in a warm place with bottom heat; many other plants such as aglaonemas, alocasias, schismatoglottis, and many other aroids are propagated in like manner.

Nepenthes, in its many different varieties, with the exception of a few, is not a very difficult class of plants to strike, providing the cuttings are taken at the proper time. In making these cuttings care should be taken in selecting the right kind of wood. Select wood which has become quite firm, not using any that is soft. Cut into single eyes and pot into small pots in a mixture of fibrous peat and sphagnum moss; then place them in a propagating case, keeping them syringed freely, never allowing them to become in any way dry. Cuttings can also be struck in inverted thumb pots, enlarging the hole in the bottom, inserting the cutting, wrapping a little sphagnum moss around it to keep it in place. These should be placed on a bed of sphagnum moss, keeping it well saturated with water so as to give them sufficient moisture. The latter method is by far the quickest way to root them, but not the best on account of the roots being so easily damaged by potting. I think the first method described is much the best, even if it takes a little while longer, as there is less danger of losing them.

Cyanophyllums and sphærogynes, our most majestic and attractive stove plants, are increased by top cuttings, or one eye cuttings, the latter making by far the best plants. This is done by cutting off pieces of the stem below the eyes about an inch long, splitting them in half, making two cuttings from each piece, the eyes being opposite. As a rule the leaves of these are very large, and on this account they should be partly cut off, so as not to take up too much room. The cuttings should be placed in small pots with a little fibrous peat at the bottom, filled with sand, and placed in a propagating case and kept closed until rooted, when they should be potted into larger pots, put back in the frame until the roots begin to show signs of coming through the soil. After being hardened off they can then be removed to the stove.

Such are some of the methods adopted in a stove propagating house. Time being limited in the preparation of this paper the different methods which are adapted to the other numerous stove plants must be left to a future date.

The New Palm House at Lincoln Park, Chicago.

In this issue is presented a series of views of the interior of the new palm house in Lincoln Park; they fail, however, to give full effect to the scene actually presented to the visitor.

The house is 156 feet long, and has an average width of about 80 feet; the height to the apex at centre is 54 feet. The roof is curvilinear in shape, the curves ever varying in radius, with reverse curves near the low eaves, breaking it into pleasing harmonic lines. Utility has also been studied; the curves of the roof run into each other without breaks, and thus prevent the loss of glass by sliding snow.

The upper arch to the entrance is across a wide terrace of two slopes; the use of the slopes brings the floor of the house to a point about 6 or 7 feet above the level of the flower garden, at the north end of which the palm house is situated. The two slopes of the terrace are mounted by flights of blue Bedford stone steps 30 feet in width, and a walk of the same broad proportions leads to the entrance of the house. Within the doors is a vestibule of 25x20 feet, to prevent as much as possible the inrush of cold air at each opening of the outer doors.

Passing into the house the first thing to strike the attention of the visitor is the sense of quiet and restfulness that pervades it; an appearance of roominess prevails, although the size of the house is not apparent, the lines of its roof and walls being in perfect harmony. The paths are comfortable in width, and wind round and through arrangements of rock work in an irregular manner. Pleasant surprises are met at every turn; here and there extended views can be had of undulating moss covered banks, in which are planted palms and other ornamental plants. Everything is planted out; neither pot, box nor tub intrudes on the scene.

The first object to strike the eye of the visitor on entering the house is a collection of bananas of large proportions,

VIEWS IN THE NEW PALM HOUSE AT LINCOLN PARK, CHICAGO.

clothing a sloping bank, at the foot of which lies an irregularly shaped pond, rock bound, in which fish sport gaily. Aquatic plants, ferns, etc., fringe its borders, while from off a rocky point stands a fine plant of Papyrus antiquorum; adjacent is a clump of eucalyptus in variety. Following the path leading to the right are to be noted fine specimens of Ficus elastica and Cycas revoluta. On a rocky island which cleaves the path is planted a fine Alsophila australis with a ten foot stem. Off to the right stands a large clump of poinsettias, which even now show evidence of former beauty. Imantophyllum grandiflorum is near by in full bloom, a reproach to those who are inappreciative of a good thing. Marantas are seen doing well as we pass along, and Acalypha macrophylla covers a projecting point in a blaze of color. Near by stands a fine plant of Carludovica palmata, with a fine specimen for company at no great distance, while the summit of an elevation as we turn the end is the home of a fine specimen of Phœnix dactylifera. A group of Crinum amabile is seldom without a spike of bloom, than which nothing can be more satisfying.

Ruellia macrantha adds here "another feather to its cap." We pass along, amid dracænas, pandanus, cordylines, beaucarneas, anthuriums, dieffenbachias and hoffmannias. A cluster of crotons catch the eye by the evidence they show of being quite happy. Among palms we notice seaforthias, chamædoreas, caryotas, Rhopalostylis Baueri and Rhapis flabelliformis, with chamærops and latan-

ias in plenty. The largest specimens are planted on the undulating ground in the centre, generally on the highest point of the elevation, giving greater emphasis thereto, while the smaller plants are used under without crowding, and the whole surface is covered with selaginellas, etc. The effect is soft and pleasing.

The rock-work extends back from the path on either side in picturesque arrangement, forming pockets in which ferns, gymnostachyums, fittonias, begonias, various members of the genus ficus, and other beautiful forms from nature's boundless stores are established, their growth softening the lines of the rockwork.

The plants are all doing well. Having been planted only 90 or 100 days ago the effect already produced lends the assurance that a summer's growth will blend the whole arrangement into beautiful harmony. Opening from the palm house is a conservatory, and under construction is a fernery, also entered from the palm house, but of this more anon.

Miscellaneous Seasonable Hints.

You will most likely have some pansies in cold frames for spring sales. They pay well when taken care of, and should be covered with sash, and on every day when the sun is bright given a little ventilation. If frozen tight, pansies will not hurt for weeks at a time in that condition, but as the season advances, warm days and cold nights occur, and there is where the mischief is done. As soon as hard freezing is past they should be gone over and firmly pressed into the soil. Pansies that have been protected with glass will with us be in bloom by middle of April, and all sold at a good price before the field grown ones are in the market, which often sell as low as 20 and 25 cents per dozen.

We are now taking off a cutting from all the geraniums that are in 3-inch pots. It won't hurt the parent plant at all; there is lots of time for it to break and make a fine bushy plant, and the cutting will make an ideal bedding plant. Don't trouble to put them in the sand; they make much better plants if potted firmly in a 2-inch pot. Water thoroughly when potting, and after that be rather sparing of water till they are rooted. They need little shade, and with good care you won't lose 2 per cent.

This week we are potting from the seed pans cyclamen, centaurea, verbenas and lobelias that were sown in January. I prefer to put the young cyclamen in flats of convenient size, about one inch apart. The other plants mentioned I pot five or six in a 2½-inch pot. It saves much room for a month, when they can be handily divided and shifted into their selling pots.

Unless you had a very warm house your coleus have grown very little during this cold winter, but from now on growth will be rapid, and as they are the quickest and easiest of all plants to root, you can soon get up a stock. Of late years the coleus has been much troubled with mealy bug in our locality. A coal oil emulsion is death to the bugs, and perhaps to the coleus too. A good waterer can always keep these pests down by a fine hard stream of cold water; they can't stand it. Coleus thrive best on a warm dry shelf where the air can get all around them.

You cannot get your Easter crop of Bermudas and longiflorums in just right without continual care. A large and well known grower for the Philadelphia market once remarked to the writer that lilies required considerable labor. He considered they wanted at least "six moves" and so it is. When the buds drop down or become pendent, you can generally force them out. Those in that condition now should be removed to a cool house, and will be nicely in time for Easter.

Azaleas will want some moving round. Some varieties will want a very cool place to keep them back. In an ordinary greenhouse temperature, say 45° to 50° at night, Mme. Van der Cruyssen and Simon Mardner, both fine double pinks, will just now be flowering, while Emperor de Brazil, a lovely light pink, and Flag of Truce, a fine old double white, will take quite a little forcing.

There is no time of the year when palms and other plants burn as badly as they do now. They have been unaccustomed to the bright rays of the sun for several months and burn easily. Your palm house should have a light shading at once; 3 pounds of white lead in a pail of naptha is about right, and put it on with a whitewash brush; syringing is quicker, but you will save in material enough to pay for the labor with the brush.

Buffalo, N. Y., Feb. 27. WM. SCOTT.

A New Chrysanthemum Fungus.

In one of the houses of Messrs. W. & C. Greenway, London West, Ontario, florists who have at least a provincial reputation as successful chrysanthemum growers, there appeared, toward the middle or end of last August, a blight on the chrysanthemum, which proved quite destructive to the plants and difficult—in fact the Messrs. Greenway found it impossible—to check. It was first observed on a table of the Mrs. Senator Hearst variety, which had been sent from California in the spring. When the fungus appeared the plants were in vigorous growth; they had been planted for cut bloom and had developed stems ⅜ inch in diameter with corresponding foliage. On the plants affected in August and September the flower buds formed, but never opened; on plants attacked later, flower and foliage were arrested at the stage at which the yellowing and dark blotching of the leaves set in. The owners sprayed the plants with all their fungicides, but without any apparent effect on the disease. It escaped from the variety named above and attacked a patch of E. D. Smith.

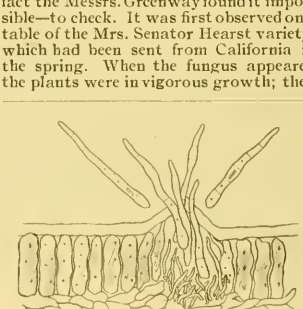


Fig. 1. Cross-section through leaf near the edge of a spore pit or acervulus. The conidia are shown about twice the length of their true proportion to the thickness of the leaf.

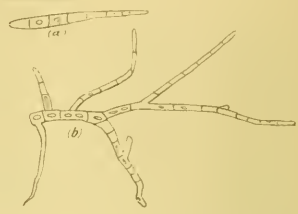


Fig. 2. (a) The conidium (or spore) as it escapes from the acervulus in the leaf; (b) as it had germinated in 48 hours in a cell culture.

The large and juicy leaves of the latter variety seemed specially favorable to the promotion of its growth, for it seemed to spread quickly from that to all parts of the house. My attention was called to it about the end of November. I made a microscopical examination of the affected tissue and found a mycelium ramifying through the parenchyma of the leaf, developing numerous nodular knots in the tissue, from which there were given off by abscission through ruptures in the upper and lower epidermis hosts of large fusiform spores. The description and specimens were sent to Prof. J. B. Ellis, New Jersey, who pronounced it a new species, although externally resembling Cavarra's Septoria Chrysanthemi in Fungi Langobardiæ. It will be described in the current number of the Canadian Record of Science under the name *Cylindrosporium Chrysanthemi.* E. AND D.

The fungus can be easily recognized by the dark blotches, usually about a half to three-quarters inch in diameter. In these blotches are found the spore heaps or pits and beyond them the leaf turns yellow; not long afterwards the whole leaf shrivels and is drawn downward to the stem, as shown in the photograph, Fig. 3. Fig. 1 is a section through the leaf showing one of the sporing pits with the exuding spores. These pits are numerous and hundreds of spores exude from each. Spores planted in a culture cell in a drop of chrysanthemum juice and kept at 75° Fah. had germinated and branched in 48 hours as seen in Fig. 2 (b), having grown from a linear spore about 80 micros, Fig. 2 (a), to a branched hypha of 270; and at the end of 60 hours from the time of sowing, the longest filament of a loose net work of hypha was 5,280 micros, being about one-fifth of an inch.

As the hyphæ of this fungus grow through the tissue of the leaf it cannot be easily reached by external applications. Doubtless the best course is to burn the affected leaves or destroy the plant as soon as the disease is observed.

London, Canada. J. DEARNESS.

Leaf Spot of Chrysanthemums.

A report of the New York State Agricultural Experiment Station on the subject of leaf spot or blight of chrysanthemums informs us that the disease may be practically controlled by the use of Bordeaux mixture made as follows: Dissolve 2 pounds of copper sulphate, add whitewash made of 1½ pounds fresh slaked lime, dilute to 22 gallons with

Fig. 3. Chrysanthemums affected by Cylindrosporium Chrysanthemi E. & D. Right-hand one most recently affected. Left-hand one leaves all affected and drawn downwards to the stem except two or three at top. Middle one all blackened, and most of the leaves fallen off.

water, and then add enough soap to make a suds. It is further recommended that all diseased foliage be removed and burned.

Sweet Peas for Cut Flowers.

Excelling in every point, the sweet pea doubly excels as a cut flower. It was made for just that. Such beauty and grace and fragrance on such stems, added to its unstinted production of blossoms, makes it the delight of both the florist and the amateur. Its woody stems are made more so by plenty of potash; and high culture will produce stems 14 inches long, and not a thorn the whole length. The improved varieties have a good percentage of four blossoms on a stem; above that number nothing need be expected at present but an occasional double stem.

The following points are for the practical florist:

As a July and August flower, sweet peas can easily be grown in abundance. During those months the regular florists are likely to have their trade stolen and the market drugged by other enterprising persons who plant this flower as they would culinary peas. With seed at wholesale prices and a strip of land, the basket hucksters are likely to reap the summer harvest. Indeed almost everybody can have their own row of sweet peas.

But why don't the florists take in the situation, and have this flower ready for the school graduations? They ought to be ready by the middle of June to begin cutting in the northern range of states. Before speaking of their earlier production under glass, probably the last two weeks of June would be worth more than the entire months of July and August. The ordinary rules for bringing forward half hardy garden stuff would work well with sweet peas. Starting them in a cold frame and transplanting them; making the ground early by fall preparation; a careful use of nitrate of soda; an inexpensive use of cotton cloth to keep the ground from getting chilled nights, such expedients would be practical for this flower. It germinates at a low temperature, stands frosts, and responds readily to kind treatment. One florist in Hartford plants a row in the fall, and by winter protection has had blossoms in May. Early in May sweet peas were quoted in New York at 50 cents per dozen stems. I would not plant them in a greenhouse where the summer temperature is maintained. A fermenting heat is bad for them when tender. They naturally make their root growth early in the moist spring ground, and need to be well along before the summer heat strikes them. If I put them under glass I should keep in mind this condition, and regulate the heat about as it would run outside from April to July.

What varieties are practical for the florist? Price of seed and popular tastes will largely rule. There are but two seed houses in this country that carry anything like a complete collection of sweet peas. It does'nt pay. A dozen seeds of a new Eckford cost as much as a pound of some popular variety. The Blanche Ferry, or the Butterfly at 65 cents a pound is business, and both these varieties deserve all the popularity they have. The three shades of pink, lavender and white are likely to predominate in popular taste. The pink and white, and the lavender and white, and the three in combination, or each color by itself, make up the bulk of the sweet pea trade. Next to these delicate shades, in popularity, stand the very dark, rich varieties. The Boreatton leads them, although Mr. Eckford now excels that with his new Stanley. There are all shades and combinations of red, purple and brown between, and all are beautiful to those who love to study individual blossoms. White is always a standard, and the demand for it in this flower keeps the price about three times what it should be. This year the Painted Lady is quoted at 50 cents, while the common white is $1.50 per lb. A good substitute for the latter is Fairy Queen, which to most people passes for pure white, having only delicate pencilings of carmine on the standard, and is quoted at 75 cents per lb. It is a lucky seedsman who can get the proportion of white he wants at any price.

The florist wants for his popular trade the following, in order: White, Blanche Ferry, Butterfly, Lottie Eckford, Apple Blossom, Fairy Queen, Adonis, Princess Beatrice, Crown Princess of Prussia, Princess of Wales, Painted Lady, Scarlet Striped. These are delicate varieties and range from 45 cents to $2.00 per lb. I have not put them in the order of their merit, but of their utilitarian value for popular and cutting purposes. This is not a list for seedsmen. For dark varieties for cutting we have Boreatton, Indigo King, Purple Prince, Black, Imperial Blue, put in the order of their depth of color.

What are the finest, large, self colored Eckfords now in the American market? Mrs. Sankey, white; Countess of Radnor, delicate mauve and lilac; Mrs. Gladstone, pink; Splendour, bright rose; Apple Blossom, pink and white; Capt. of Blues, blue; Orange Prince, orange pink; Boreatton, dark maroon. Every seedsman ought to bring within the horizon of his best customers these gems.

While the collector of varieties prizes every new sort, and enjoys the study of their differences, it is very disappointing to bouquet a general mixture. The finest varieties at once lose their individuality in a general mass. To put the Apple Blossom into a bouquet of Blanche Ferry, or a Countess of Radnor in among the Butterfly is to throw them away.

And some interesting varieties are worthless for bunching, like the Vesuvius and the medium purples. The florist should have the brilliant scarlet and crimson varieties, for many a lady will not dare to set her complexion off with the delicate shades. W. T. HUTCHINS.

A Retailer's Views.

BY THOMAS CARTLEDGE.

[*Read before the American Carnation Society at the Pittsburg meeting.*]

With pleasure I undertake to give them to the best of my ability, though I cannot promise much that will be either new or instructive; but it is always a pleasure to think and write about flowers we like and are especially interested in.

Carnations have so many elements of popularity as a flower—their beauty, fragrance and good keeping qualities, the quantity and reasonable price at which they can be sold, all combine to make them one of the best and most desirable flowers we handle. An all-the-year-round and every-day flower, they have become a staple article, one of the necessities of our trade, and have brought remunerative prices to both grower and retailer I hope this past year. Selling well during the summer months, good stock was always in demand at $1.00 per hundred at wholesale—a higher price than we have paid in past years.

From away back in the early 60's, when we had (as far as I can recollect) only one variety (I forget its name) of the monthly or tree carnation, as we called them, then of a dark crimson purplish color; a good grower, making large masses of a very pretty foliage; a fine sweet flower but a very shy bloomer. This variety seems to have disappeared, although a few years ago I found what appeared to me to be the same variety growing in an old garden near Bordentown in New Jersey, on what is known as Cream Ridge, blooming profusely all summer, not making as much foliage as it did on the heavier soil where I first made its acquaintance, and quite hardy, living out of doors all winter and starting to bloom again early in the spring. Some plants I procured from there and transplanted to our heavier soil, took on the old form—lots of growth and very few flowers. About 1862 La Purite and President De Graw came to my notice. We grew them for a time as pot plants, not being then in the cut-flower business and not knowing their value for that purpose. As they became popular for bouquets etc., and we had started the cut-flower business, we commenced buying them out of the veteran carnationist, Charles Zeller, of Flatbush, an originator of many new varieties and about the only large grower for cutting that we knew of at that time, La Purite and De Graw being the varieties grown. Another white variety, named Flatbush, an immense white flower that promised well did not come up to expectations, bursting badly and was abandoned. From one to two thousand per week was about our supply, all pinched off short and about present wholesale prices. There were no long stemmed flowers in those days; every bud must be allowed to come out as they counted when opened.

I would now draw your attention to a few points that seem to bear directly on this subject—the first of which is good pot plants for spring sales. These have been totally neglected, almost forgotten in the rush to grow only for cut flowers; I suppose because cut flowers are more easily handled, less bulky for shipping and more profitable. We used to grow plants well in 4 and 5-inch pots and they always sold; do not remember any plant that was more attractive or sold better and that was at a time when there was about only one good variety for pot culture, viz. La Purite. Could not the smaller plants that are not taken up but left out to freeze, be lifted and potted, stored away in a cold house or frame and kept dormant during the winter, and started along in good time for spring sales and orders? They would make nice plants for planting out and be in good condition for flowering in the open air. There are so many good varieties now, any of the popular varieties would make short bushy plants if treated this way, although there is no doubt special kinds for pot culture to which it would be well and I think profitable to give some attention: Century, for deep pink; Robt. Craig, scarlet; Peter Henderson or Lizzie McGowan, for white; Buttercup, for yellow; and Sunrise and American Flag for variegated, I am sure would give satisfactory results to both grower and dealer. It might not answer so well for those at a distance from our markets, but it would certainly be profitable for our near at hand growers, if there is any profit in plant growing (which many of our florists dispute though they still keep at it, living along fairly well, and seeming to take a fair amount of pleasure out of life). Even for our growers at a distance would they not be nice for an order trade? Grown as described they would make nice compact plants with plenty of root so that they could be turned out of pots with good balls for shipping. I feel sure they would generally give satisfaction for planting out; a little attention, more than is usually given, to packing and shipping would help; disbudding would undoubtedly improve the flowers, as I notice many come with one good flower and lots of buds and small stems. The flowers would be better and stems stiffer if these small buds had been taken off.

In my first experience with carnation flowers, they were all pinched off short; to get a few long-stemmed ones was quite a favor; it was an object to save buds then, but now when fine flowers and long stiff stems are necessary would it not pay to disbud? It would take a little more time, but there would be no less flowers only better ones. Sort them nicely in separate colors; poor and bursted flowers put in separate bunches to be sold at lower rates; a little good foliage is always desirable, as there is nothing so pretty to arrange with the flowers as their own foliage.

There is no flower that keeps better than the carnation, but we must have a suitable place for them. Have kept them in good condition for two weeks. Years ago when all we handled were short, as we only had about one shipment per week from Charles Zeller, they were taken out of the boxes and planted (as we called it) in shallow boxes filled with damp sphagnum and put in an outside shed where the temperature was just about freezing in winter, covering the boxes that were placed on top of one another with blankets to keep them from freezing. Have found just such a situation the best place for keeping them now. Have kept the long stemmed ones in jars of clean water for several days, and in as good, if not finer, condition than when first received, as they seem to get larger and harden up under such treatment and stand more when used in cut flower work for heated rooms. Have lost quantities in past winters by trying to keep them in a city cellar or vault, although these places were cool and clean enough, but between the gas, which seems inseparable from our city atmosphere, and the murky close atmosphere they went to sleep in a few hours, never keeping well over one day, losing all the beautiful freshness and color, became dull looking and only fit for the rubbish barrel. They do not seem to keep as well in refrigerators as they used to, especially after refrigerators have been used awhile, the air seeming to become vitiated and unsuitable for them. Carnations like fresh pure air, with not too much moisture. Careful handling, clean vases and water, a cool atmosphere.

Now for a few words as to the best selling varieties, for that is the most important part of the view. The grower wants to raise most of the varieties the shopman sells most of, and we want to buy those kinds that our customers prefer, that sell best and give the best satisfaction. Although we get a great deal of pleasure out of the business, we are in it for a living and a little more, if we can get it, and I think the growers are also; we must, therefore, work together to please the public, educate them, if we can, to our standard of taste as to the best kind and colors, but let them have their own way if they will not take the kinds we think best.

Portia is the best scarlet; an old variety but the very best of its color we have had so far. I trust there may be something better for next year with a larger flower and a better stem; we cannot improve the color much. Have not handled quantity enough of any other scarlet to be able to give an opinion.

Robt. Craig is a fine flower and good color, but the form is not good and it gets sleepy too soon.

Pride of Kennett and Anna Webb have been our best crimsons, both have done well and sold fairly; though not good keepers.

Difficult to give an opinion on whites, there are so many good ones, but have been as well pleased with Hinze's as any, when well grown, as it makes a fine flower and good stem and is a good keeper. There are too many poor ones of this variety offered.

Lamborn has been fine and has sold well, and so has Lizzie McGowan. There are so many good whites, and we get such a large supply that we are not inclined to worry about new sorts; can pick enough good ones out of what we have.

Grace Wilder has been our leading pink only because we could get it in quantities.

Aurora has sold equally as well when we could get it, although it sometimes shows that slaty, ashy purple tint when a little old.

Madame Rowland, a sport from Grace Wilder, (at least that is the only history I can get of it) has been one of our best, although we have only had it from one grower; it has many good qualities that are desirable in a carnation for a retailer's use. A good clean pink, a trifle darker than Grace, holds its color well, does not fade or become streaky, a good fair stem and foliage and does not burst. If it keeps up to its present promise it must become a leading pink variety for commercial purposes, although not so large and fine a flower as either Edna Craig or Grace Battles.

Thomas Cartledge has been the best dark pink, color almost identical with

old La Purite; has sold well, although there is generally not much demand for this color; a good stem and a good keeper and does not fade out quickly.

Edna Craig, the finest of the light delicate pink class has a very close competitor in Grace Battles, although not identical in color. From what I have seen of it think it the finest carnation grown, although, in my opinion requiring another year to tell us how well it may do in general cultivation.

Daybreak, if well grown and disbudded would be as fine as any. Have been more than pleased with what we have had of it and feel sure it will be well up in front next season.

Helen Keller, after the style of Chester Pride and Mrs. Carnegie, will be the leading variety of its color if it continues to do as well as it has done with Mr. Lonsdale this season. I have not seen anything that comes near it for general good qualities.

Buttercup is the only good yellow, or rather yellow striped, up to date. Seems to be hard to grow, but when well done, a grand variety; there has not been enough to go round this year; it must be grown the very best, as we have no use for it if poor. It is one of the kinds that when good it is very good, and if poor is very poor.

These are about the only varieties that we have had much experience with, speaking only from a limited observation of the newer ones, but of the older varieties, from several years acquaintance and handling, so that I know whereof I speak. There are undoubtedly many other good ones, but these seem to answer present purpose.

In the earlier carnation days, about a thousand a week was our supply. We have used of late years at least a thousand a day during the busy season, and am inclined to think our average would be nearly that the year round.

Indispensable for our summer work, would not our growers do well to make an effort to give us a good variety and quantity every day? They should pay well at last summer's prices, $1.00 per hundred. Scarce, and hard to get very often, out of all our growers there was only one who could send us one hundred crimson every Saturday, for which we had a special order. Would not the pot plants spoken of for spring sale do well for summer flowers, and be a paying investment for our growers who are located where land is cheap, and at a distance from a market for plants?

That there has been a glut of carnations during January of this year, grower, retailer and commission man must admit, and it can only be explained by the theory that there has been more grown, that they have done better, the dry season was favorable to them, plants being hardier and stockier and in better condition with less disease; more have been sold by the retailers than ever before, but less, very many less have been sold by the fakirs (street peddlers). Owing to the very cold weather they could not place the large quantity in the street that they usually have done in the past mild winters. They are large buyers of cheaper and older flowers, and to me it is an open question whether they are a detriment to our trade or not. I am sure they are a great help to the grower and commission man, as they buy largely of stock that is unsalable to the stores, the cullings of all kinds of flowers.

In conclusion will give my experience of the different seasons when carnations are used, the colors and kinds that are wanted, not that I think it infallible, but only the demand as I have found it.

During the summer and fall months white is the most used, in the proportion of four or five to one of any other color, most of our summer work being for funerals. For late fall and winter up to Lent, the colored varieties have been in most demand in the following order: Pink, scarlet, white, yellow and crimson. With the advent of the Lenten season Easter and early spring white seems to have the call. I have noticed for several years that more whites were thrown out in the early winter than of other varieties, and later on it was the reds and other colors. It may not have been the experience of others but it has been mine for several years.

Temperature For Carnations.

In following up the discussion with the above heading, which has appeared in the FLORIST during the last several months, I have been surprised and somewhat amused at the wide range taken as to the proper amount of heat and moisture required to make a success of carnation growing; yet I take it these writers are carnation experts, and among the most successful growers in the country.

As a matter of fact, while there are individual varieties, which without a doubt, are partial to certain localities, yet as a class, from my experience, I know of no plants which more readily adapt themselves to circumstances than the carnations, provided it is not carried to extremes.

The two greatest enemies in the forcing of carnations are red spider and excessive moisture. To run the house at a temperature of 55° to 60° without an adequate supply of moisture, the plants would soon be infested with red spider. On the other hand, if the house is run at a low temperature, with an undue amount of moisture, the plants would soon become diseased and damp off. Nor do I believe it is essential to keep the house at a uniform temperature. It is my practice to run the house with the weather, that is when the atmosphere indicates a temperature of from 30° to 40° I keep the house at 55° to 60°; when the outside drops to 20° I let the house go down to 50°, and during zero weather or below the temperature goes down to 45°, and occasionally, as has been the case this winter, so low as 40°. Of course at this low temperature the plants are almost at a standstill, but with the extreme cold outside and the glass covered with frost, a higher temperature can only be kept up by heavy firing, which I believe to be far more injurious to the plants, than carrying them through the severe spell at a low temperature for a few days. until the weather becomes milder. By following this course the radiation is kept uniform, without material change by either increasing or decreasing the number of pipes, and when the weather becomes more favorable the plants appear to start off with renewed vigor.

As to watering, like other plants, carnations should be watered whenever they need it, whether it is once a day, or once a month. In mild weather when the house is running at a higher temperature; the plants should be sprinkled every day, watching the benches for dry spots, which should have a thorough watering. In severe weather, when the house must necessarily be kept closed and running cool, the watering should be on the walks and under the benches.

There is one point in which we all appear to stand upon the same platform, that is plenty of fresh air; ventilate freely upon every available opportunity. There are few plants so easily affected by a confined atmosphere as carnations. R.

Echoes From the Pittsburg Carnation Meeting.

"More *Divinity* to all." John Thorpe.

"Whose overcoat, etc., is this?" R. Kift.

"A great aggregation of mental ability." D. D. L. Farson.

"I am not a Divine flower." W. C. Moreland.

"I am talking to a lot of cranks." Wm. Hamilton.

"I insist on quiet. Now, behave yourselves." Toastmaster Patterson.

"Four professors! The carnationists are getting very high toned."

"I only put my glasses on when I sign checks." Great Scott.

"Indianapolis is not out West. It is only on the way out West." E. G. Hill.

"Indianapolis is a nice place, but it has the ague all the year round." Messmore.

President Lonsdale missed that horseback ride, but he had the bridal chamber at the hotel and was comforted.

The carnationists had a test of Pittsburg's patriotism as well as considerable entertainment, in the marching societies, which braved the snow and slush to celebrate Washington's birthday.

Spring Flowering Plants.

During the latter part of the winter and through the spring much variety may readily be had in the stock of plants available for decorating and also for pot sales, and though this abundance of flowering material has been taken advantage of in some localities, yet there are many valuable plants that could be added to the average florist's stock without adding greatly to his cares and labors.

Among these may be mentioned some of the acacias, a very extensive family, and one that is very feebly represented in the stocks of most growers; in fact so much so as to be looked on as quite a novelty even in some of the larger cities, where, with the exception of a few plants of A. pubescens, but little has been seen of this genus.

The acacias most valuable to the florist belong to the cool house class, and are by no means difficult to cultivate, the chief essentials being light, open soil in which they should be firmly potted, (and with due regard to drainage) and an abundance of water. Propagation is effected by cuttings, and by seeds when the latter are available, but as there are but few of the species offered by the seedsmen the former method is the one usually adopted, and is not a particularly difficult operation. The cuttings should be from firm young wood, small shoots taken off with a heel being the most satisfactory, and when protected from draughts and sunshine do not take very long to form roots. As soon as rooted they should be potted off into small pots, using a compost in which a large proportion of peat has been mixed, and the plants should then be placed in a temperature of about 55°, and partially shaded until they are well established.

The young plants should be potted on as they require it, and in early summer should be plunged out doors in ashes or other suitable material, it being preferable to give them some slight protection

from the sun, a lath shelter serving well for this purpose. Under these conditions the growth will be well ripened and an abundant crop of flowers be assured, the plants being brought in before frost in the fall. Large acacias that are grown for decorating and kept year after year will of course need some pruning to keep them in shape, and this operation should be done as soon as they have finished blooming, severe pruning being rather beneficial than otherwise.

Among the best species are the following: A. pubescens, A. Drummondii, A. dealbata, A. Riceana and A. armata, the first three named having pinnate leaves of various sizes, and the last two having simple leaves, or rather phyllodia, while A. armata is further distinguished by being somewhat spiny along the stems, the flowers of all being yellow in different shades, and are very freely produced either singly or in racemes from the axils of the leaves.

Cytisus canariensis and C. racemosus are now so well known as to need but slight reference here, though it may be noted that the present is a good time in which to put in cuttings of these plants, the cuttings being planted in clean sand that has been packed hard, and they should be well watered in and protected from sun and air in order to prevent flagging. The young plants should be treated liberally to induce a rapid growth and will require pinching from time to time to induce a stocky habit, the best place for these also during the summer being outdoors, where they may be treated as recommended for the acacias.

If round headed, or formal plants of cytisus are preferred, this result may be secured by trimming them in with a pair of shears, the shearing being done at such intervals as the growth may require, very pretty little plants being had by this method of training, though not nearly so graceful for decorating with as more naturally grown plants.

The various forced shrubs, azaleas, hydrangeas, deutzias, rhododendrons, lilacs, etc., all take a prominent part in the spring stock of the enterprising florist, and enable him to keep his window bright at all times, the last two mentioned above being a little more uncommon than the others, though very easy to force at this time, the plants so used both of rhododendrons and lilacs being usually European grown and imported in the fall like most of the azaleas, then potted up and stored in a frame or cold house until required to bloom.

W. H. TAPLIN.

Washington.

Bits of bright color are already beginning to appear here and there in Washington as heralds of the gala appearance which the city will present on inauguration day. These with the sunshine have banished, for a time at least, sombreness of wintry March, which has prevailed during the entire week. Notwithstanding the inclement weather stand-builders along Pennsylvania avenue have pushed their work until every available government reservation fronting the avenue has been covered with boards, elevated about five feet above the sidewalk running back on an incline, some of these to a height of thirty feet, roofed in and furnished with chairs. From these our citizens and those visiting the city March 4 can view the procession for the sum of from $1 to $5 per chair, according to location. Some of these stands occupy as much as ten feet of the sidewalk. Is it any wonder that congress is inquiring into this matter of speculators occupying the reservations and sidewalks, and compelling the public to pay such prices for a seat. Congress is now investigating this matter, and I hope by the next inauguration they will have enacted some law benefiting the public in this respect.

Senator and Mrs. Cockrell gave a dinner last evening in honor of Vice President and Mrs. Morton, where the guests assembled to greet and, in many cases, exchange farewells with Mr. and Mrs. Morton, who have been such popular and conspicuous figures in the social world during the present administration. The mantels of the parlors were banked with adiantum studded with perfect specimens of long stemmed Brunners and American Beauties, artistically arranged in cut glass vases. The chandeliers were trimmed with Asparagus plumosus and suspended from each was a bunch of Beauties. In the bay window, back of the receiving party, a large group of Harrisii and smilax, was tastily arranged, which formed a conspicuous feature of the decorations. The lights were all covered with pink shades which gave a touch of color to the entire scene.

The 22nd was the one hundred and sixty-first anniversary of Washington's birthday, and the decorations at Mount Vernon on that day were both unique and very tasteful. A handsome Masonic emblem, compass and square, composed of red white and blue immortelles, was given the post of honor at the head of the general's sarcophagus, while a lovely bouquet of roses was placed in a mortuary vase and sago leaves crossed, with a bouquet of Perle and Bride roses in the center, attested the fact that the memory of the great Washington yet lives in the hearts of the Mount Vernon people. A handsome pillar of Bride roses and sago leaves, crossed with center bouquet of La France roses graced the sarcophagus of Mrs. Washington. The tomb both interior and exterior was tastily draped with American colors.

The crowning event of the season fittingly chosen as a brilliant culmination, was the Washington Assembly given Tuesday night at the Arlington Hotel. The floral decorations were unusually elaborate. The window recesses and corners of the apartments were banked to the ceiling with palms, along the branching stems of which myriads of yellow electric lights were used, producing a charming effect.

Mr. John R. McLean, who so kindly entertained the S. A. F. last August at his park on Florida Avenue, gave a fine dinner last Friday evening. Christine de Noue roses were the only flowers used. The center-piece was a large handsome cut glass bowl, with silver base, filled with adiantum, and containing four dozen of this very handsome red rose, with long stems gracefully arranged; on each corner of the large table was a similar bowl about ⅔ the size of the center piece, filled in the same manner. These were connected with the center by means of smilax strings thickly studded with the same rose. The spaces between the strings were strewn with this rose; its long, strong stems, well furnished with its bright, deep green foliage, with a beautiful linen ground, made a very striking decoration. The dining room, which is one of the largest and most handsomely furnished private dining rooms in the city, was elaborately decorated with Pandanus Veitchii, crotons and dracænas. The chandeliers were festooned with smilax, from which was hung full blown roses of Christine de Noue. Over five hundred of this rose were used in the decoration. They were grown by C. Strauss & Co., who arranged the decoration. This is the first time that this rose was ever used exclusively for a decoration in this city so far as I am aware, and judging from the display it made last evening, I think it very promising. It possesses all the qualities required of a rose for such work.

Notwithstanding the Lenten season has begun, the florists report good trade during the week. Flowers have been plentiful, and quality very good. Bulbous stuff, such as hyacinths, tulips, valley, narcissus, etc., is rather a drug on the market.

American Beauty and Brunners are selling from $12 to $18 per dozen; La France, from $1.50 to $3 per dozen; Perles, $1 to $1.50; Brides, $2 to $2.75, (first-class will bring $3); White La France, $3; Woottons, $2 to $3; valley, 50 cents; violets, from $1 to $2; tulips, 25 cents to 50 cents, according to variety; narcissus, 25 cents; carnations, 50 cents; Harrisii, $1 to $2.

The past few spring-like days have increased the sale for decorative plants. The flower stands in the markets are filled with a fine lot of window plants. Palms, pandanus, rubbers, azaleas, hyacinths, liliums, narcissus, tulips, etc. The florists report that sales for this class of plants has been unusually good during the past week. They take this as an indication of a good spring trade in this class of plants.

It appears as though society were not to call off entirely during the Lenten season, as quite a number of orders are already booked for large decorations during the first part of March. In conversation with a few of the store florists yesterday they seemed unanimous in the belief that after the first two weeks of Lent had passed, society would in a quiet way be in full blast, and that they thought trade would again be as brisk as ever.

At the funeral of the late Lieut. Reynolds, U. S. N., who was killed by the cable cars a few days ago, was a ship four feet long, made of white carnations, roses and Romans, resting on a base of smilax, with flags at half mast. On the side of the ship was in purple letters, "At Anchor." The chain was thrown out into the smilax where the anchor was lost. This was presented by his shipmates, and was a small representation of the ship which he commanded at the time of his death, "The Endeavor." The piece was the work of Gude Bros.

Mr. Wm. R. Smith and Mr. Benj. Durfee are putting forth their best efforts toward getting the charter through before Congress adjourns. They have but two weeks left, and they are not going to leave a stone unturned. Mr. Smith has captured "the objector," Hon. J. W. Bailey, of Texas, who has promised to keep quiet should Mr. Hatch again get the bill before the house. This is quite a step toward accomplishing their desires. Owing to the very limited time and the vast amount of business before Congress Mr. Hatch does not speak so confidently as he did some weeks ago, yet promises to do all in his power.

Our newly-appointed District Commissioner, Col. M. M. Parker, gave a dinner party last Wednesday, at his new home on Vermont avenue. It might well be called a yellow dinner. The center piece was a large oval basket of jonquils, the

handle of which was wound with wide yellow satin ribbon, ending in a big bow at one side. At each side of this center-piece were placed handsome crystal bowls, filled with maiden hair ferns and clusters of daffodils. Four silver lamps, adorned with shades of yellow tulle, occupied the corners of the table. The mantels were banked with Adiantum cuneatum, with clusters of jonquils artistically arranged among the ferns. The chandeliers were draped with Asparagus plumosus. Daffodils were arranged in handsome cut glass vases, and placed about the dining room wherever they could be placed. The souvenirs were silver tooth-pick holders for the gentlemen, the name of each neatly engraved on the side. The ladies received dainty emery balls of light blue silk, which were topped with a design in repousse silver.

Dr. and Mrs. Wm. W. Johnson gave a reception Monday evening last in place of an afternoon tea postponed a fortnight since as a mark of respect to the memory of ex-Secretary Blaine. The entire house was tastily decorated with palms, pandanus and dracænas. The chandeliers were twined and festooned with smilax. The mantels were banked with Adiantum Farleyense, with three crystal vases filled with jonquils on each mantel. The center-piece was an oval plateau filled with adiantum and yellow tulips, resting on an oval piece of fine linen daintily embroidered in white and yellow chrysanthemums. At each end of the table smaller baskets similar to the central one were heaped with yellow tulips, presenting a very rich appearance.

C. LESLIE REYNOLDS.

New York.

Siebrecht & Wadley's annual orchid exhibition is now in progress and is well worthy of a visit. This year it is held at the greenhouses at New Rochelle, and although not so easy of access as it would be if held in New York city as in former years, it is far ahead of anything that could be accomplished in a hall, and gives a much better idea of the resources and extent of Messrs. Siebrecht & Wadley's establishment. The attendance has been as good as could be expected in such unfavorable weather.

The center of attraction is the big show house. This is arranged with great skill and artistic taste. The disposal of bright flowering plants in masses of brilliant color—here a bank of cattleyas, a crowd of Harrisii lilies, a mass of scarlet tulips, or a group of splendid amaryllises, there a little forest of lilies of the valley or a brilliant arch of bougainvillea—is exceedingly effective, and reflects great credit on the arranger. The benches on either side are banked with crotons, palms and anthuriums, which form a rich back ground for the cattleyas, calanthes, phalænopsis and other showy orchids which are to be seen in abundance everywhere, and from over head Dendrobium Wardianum and nepenthes are suspended in great profusion.

Opening from this show house is a range of houses, each devoted to some special section, those filled with commercial palms in every size being in particularly fine shape, the collection including all the popular kinds, and many that deserve a more general cultivation. Among the latter Mr. Siebrecht especially recommends Licuala peltata. There is an immense stock of Phœnix rupicola. One house contains fifteen immense tree ferns which are to be sent to the Columbian Exposition.

The cypripediums are about gone out for this season. C. insigne maximum, is however, still in good condition. It is a very handsome variety, and its lateness of blooming is also a strong point in its favor. C. Rothchildsianum is one of the most beautiful flowers in the whole show.

Thos. W. Weathered's Sons are about to erect for Siebrecht & Wadley five new iron houses for roses. A new commercial rose will in a short time be sent out from this establishment, which it is expected will create a sensation. Carman's hybrid rugosas are being propagated here as rapidly as possible and, as they are perfectly hardy, ought to prove valuable for hedge rows and other outdoor work. There are nineteen sorts in the set.

"All work and no play makes Jack a dull boy," was the inscription at the head of President Manda's invitation to the "Smoker" at the New York Florists' Club rooms on Saturday evening, Feb. 25. Jack ought not to be a dull boy for the next six months if he participated in that evening's merriment, for of all the "howling successes" ever credited to the New York Florists' Club, or any other florists' club, this one went ahead of everything. Decorum prevailed for a brief half hour and then everything seemed to break loose all at once, and fun unrestrained swept everything before it and held wild carnival until midnight.

The rooms were beautifully decorated with plants and flowers from Pitcher & Manda's establishment. The three mantels were banked, one with anthuriums, clivias and bromeliads, one with Adiantum Farleyense, and the other with foliage plants. In the folding door hung a plant of Dendrobium Wardianum, and over this was a big stag's horn fern from either side of which laurel festoons extended all around the room. In the center of the room was a giant tree fern ten feet high, and from its trunk depended Cattleya citrina and odontoglossums. The big window and top of the piano were also decorated with handsome groups, and the chandeliers draped with asparagus.

Each guest, on entering, was presented with a cypripedium boutonniere and, judging from the size of the crowd, it must have taken over a hundred of them to go round. Instrumental music by an orchestra, and songs by Mr. Richie, Mr. Busk and Mr. Caunfield comprised the formal entertainment provided. With the rendering of Mr. Richie's first song, "The Good Rhine Wine," Mr. Jos. Manda and a corps of assistants began the distribution of claret punch and pipes of many patterns, and it was not long before a dense cloud of smoke enveloped everything. Later on an appetizing lunch was served.

Under the shade of the big tree fern was the great distributing center for all the fun, for here were to be found Koffman, the two Asmuses, Hafner, Keller and other worthies, who kept Joe Manda busy confiscating the contrivances with which they sought to make life a burden to the neighbors, while "ever and anon" they would break out in musical chorus that they proposed to "Marry the Man in the Moon." "I don't wonder a bit that the landlord wants to raise the rent. Every two weeks we have a racket here, and he thinks we are millionaires," said Koffman, as he tried to put a chair into the pocket of the pianist, and Ernst Asmus exerted himself in a vain endeavor to smoke his pipe and play a tune on the two-foot stem at the same time, while ex-President Dean was hunting, but without success, to find another gray headed man in the room beside himself. It will be a long long time before President Manda's smoker is forgotten.

The first monthly exhibition of the New York Florists' Club will be held at the club rooms on March 15, from 2:30 till 7 and from from 8 to 10 p. m. All the available space for exhibition purposes is already spoken for. At the next meeting of the club, Mr. A. David Rose will read an essay on chrysanthemums. Mr. Wm. Plumb having resigned as manager of the Madison Square Garden exhibition, Mr. Henry McCrowe, of Patchogue, L. I., has been selected to fill the position.

Cut flower trade continues very quiet ever since Lent came in, and growers have to be content with pretty small returns. With lily of the valley going begging at $18 per thousand, and daffodils lying in heaps unsold, the state of the once profitable industry of bulb forcing can be readily imagined.

Chicago.

Business still keeps fairly good for the season, though it was a little quiet for two or three days during the past week. Carnations are now more plentiful from local growers, and are usually of good quality. Violets are much more plentiful, a great many being sent in from outside points; the demand is good, but the large stock has caused prices to decline a little. Roses are plentiful, and much improved in quality; very good Mermets and Brides are seen, and there is a fair proportion of good Perles. Jacqs are not yet by any means plentiful; some fine ones, good in color, with excellent foliage, are in, bringing $15 to $20.

There has been a slight falling off in the amount of bulb stuff during the past week; it is suggested that it will be held back now for a time, and the increasing rose crop will surely lessen the demand. Pink tulips are still scarce, and the yellow and white continue to sell better than red; there is practically no sale for Duchess of Parma. Very fine valley is seen.

Some extremely good mignonette is in; it is large and very fragrant; sells for $2. A lot of jonquils and trumpet major, outdoor grown, from Mississippi, were noted at one of the commission houses; they were good of their kind, but cannot compete, in general excellence, with the forced bulbs, and bring a low price. It seems impossible to persuade people of the futility of offering outdoor southern flowers in competition with the forced northern product, though the low prices realized by the former should indicate the difference in quality. We are told that some Californian growers expect to ship callas to Chicago by the carload at Easter; this experiment will be of interest both to growers and retailers. Wholesale men are expectant of a very large Easter trade this year.

There was a big turnout at the last meeting of the Florist Club, this being the first meeting held in the new quarters in the Cut Flower Exchange. The routine business, including the election of several new members, was quickly disposed of, and the party then took places at the long table that stretched nearly the full length of the spacious hall, to partake of the hospitality of the Exchange, the directors of which had decided to welcome the club to its new quarters with a supper in its honor.

The company was graced by the pres-

ence of Messrs. Robert Craig, of Philadelphia, and A. C. Walker, chairman of the Pennsylvania World's Fair committee on horticulture, who were present in the city on business connected with the Exposition, and Mr. A. C. Brown, of Springfield, Ill.

Mr. J. D. Raynolds presided in his usual happy manner, and when the coffee and cigars arrived he proposed a toast to the Exchange, which was received with applause. Mr. J. T. Anthony responded and explained the aims of the Exchange and what was needed to further enhance its usefulness. The Chicago Florist Club was then toasted, and Mr. G. L. Grant, who responded, expressed the belief that the greatest value of the organization had been in making the florists of Chicago acquainted with one another, and that it had undoubtedly been a tremendous surprise to many of the members to learn what really nice companionable men some of their competitors were when they did become thoroughly acquainted, through the medium of the gatherings resulting from the existence of the club.

Mr. Craig responded on behalf of the Society of American Florists, and spoke entertainingly of the good accomplished by that society and the possibilities of future achievements. Before closing, however, he improved the opportunity to get even with his brother Philadelphian, Col. Dan. Farson, by picturing that gentleman's character in its true light. He admitted that he wouldn't have dared to be so frank if there hadn't been a safe thousand miles of territory between them. But no one would have enjoyed these personalities more than the redoubtable Daniel had he been present.

"The World's Fair" was responded to by Mr. Walker, in a happy address. Mr. Vander Horst, of Holland, replied for the horticulturists of Europe. Mr. Edgar Sanders favored the company with a song, and a dozen others made a speech, sang a song or told a story. Mr. Craig was finally induced to sing "Annie Laurie," and everyone joined in the chorus. The party finally separated at a late hour after all joining hands and singing "Auld Lang Syne." All present voted the evening a most enjoyable one.

It is the intention to have a spread of this sort at every second meeting of the club in future.

Philadelphia.

Considering the state of the weather, there having been several stormy days the past week, the business has been good. Prices of flowers remain about the same, and there is not likely to be a slump unless a warm spell sets in.

High priced hybrids and Beauties, however, are feeling the effects of the Lenten season and are beginning to tumble. Good Brunners are to be had for 50 cents each, and very fair Laings and Beauties for 35 to 40. Mermets, Brides, La France, 8 cents; Perles, Gontiers, Niphetos, 4 cents; Bennetts, Cusins, Watteville, Guillots, 5 to 6; carnations seem to be pegged at $1.50.

We wish the growers for this market would sort their carnations, making first and second quality. The best would easily bring the better price, and if the market was full and any went to waste it would be the second quality.

The growers all send their stock tied in bunches of twenty-five, and each bunch of a color. It took a long time to bring this system into general use; growers said they didn't have the time to bunch them, and other excuses were made, but they had to come to it eventually. Now it is also certain that they will have to divide or grade their stock. At present it is almost impossible to get two dozen good carnations out of a bunch of twenty-five. This thing of making the good flowers sell the poor ones won't work any more; put fine flowers of fine varieties together, and fine prices will be the result.

Mr. Lonsdale says that before long people will be asking not for carnations, but give me a dozen of this or that variety, calling it by name, the same as they do roses, and expecting to pay a different price, according to the variety desired.

Bulbous flowers have been unusually plenty this season and growers say there has been no profit in them at all. Valley particularly has been a drug and good sprays have been sold in lots, as low as $1 a hundred, while the prevailing price of late has been $2. Freesia also goes a begging.

Easter stock is getting into shape, and there promises to be a fine lot of blooming plants about when the early date is considered. It seems now with modern houses and methods of heating it is possible to bring all classes of plants into bloom whenever desired.

A rose grower commenting favorably on a fine lot of roses sent in from another establishment recently said: "Isn't it singular, that man grows such fine roses; yet if he was to leave there and work for some one else, in all probability he would not do nearly so well. I have seen it so often; a man gets the reputation of being a good grower in one place, but on assuming charge of another, has an altogether different experience. I can't tell why it is, only I know it to be the case."

Messrs. Harris, Craig, Lonsdale, Eisele and Kift, of this city, together with a number of the growers from the "Belt," attended the annual meeting of the Carnation Society at Pittsburg the past week. They reported a very interesting meeting, and the exhibition of carnations, while not large, as being excellent in quality. Mr. Shelmire's collection, the vases of Edna Craig and Mr. Dorner's exhibit were the leading features. Mr. Lonsdale had selected some seedling flowers for exhibition, but was unfortunate in having them frozen the day before starting. There was one thing that impressed the visitors and which they will remember for a long time, and that was the hospitality they enjoyed at the hands of the Pittsburg and Allegheny Florists' and Gardeners' Club. They were treated right royally everywhere they went, and in the banquet on Wednesday evening they were more than surprised. Everything was on a grand scale. The decorations of the room as well as the tables could hardly have been surpassed; even the menu card was an artistic success, nothing was left undone to make the occasion a notable one. Mr. Robert Patterson as toastmaster was a great success. Long live the Pittsburg and Allegheny Florists' and Gardeners' Club.

K.

The feature of the monthly meeting of the Penna. Hort. Society, held February 21, was a display of carnations. The blooms exhibited were above the average in quality, some of the varieties being particularly well grown.

In A. M. Herr's exhibit the committee commended Grace Darling, Daybreak, Aurora, Fred. Dorner, Anna Webb and Louise Porsch; a vase of Golden Triumph in his collection was very highly commended by the committee and was much admired by all present.

Edward Swayne had some very choice flowers in his collection. Mrs. Fisher, Daybreak and Lizzie McGowan were singled out for commendation by the committee, while the following were very highly commended: Aurora, Puritan and Thos. Cartledge.

Mr. Craig had a fine vase of the beautiful Edna Craig, for which he received very high commendation. Puritan in this collection were good too.

A vase of seedlings was shown by G. F. Christie. A white and pink in this collection were singled out by the committee as being good; in fact they were particularly fine. A vase of Pearl was very good in Mr. Christie's lot, and his McGowans and Hinze's White were also worthy of note.

Herman Brushaber showed a fine specimen of white cyclamen, a well grown plant of fine habit and medium large flowers. He was commended by the committee for this exhibit.

Wm. Swayne exhibited a fine collection of the leading varieties, which were highly commended by the committee.

St. Louis.

Trade during the past week has been very good, the demand fully equalling the supply, which has been rather short on account of the dull weather which is still with us. The fashion, if anything, has run to violets, which are worn by almost every one down town when the weather permits, one firm alone having disposed of fully 5,000 in a single day, they being made into small bunches for wearing, and mostly sold singly. The single varieties are the ones most used, the double being scarce and hard to obtain, while the single ones are shipped from the south in great quantities. These being outdoor stock are considerably cheaper than those grown under glass, and this may have considerable to do with their popularity.

Passing Mr. Kauffman's place the other day I stopped to see Mr. John Armsby, his gardener, and to have a look at his plants. I found John busy preparing to root his dracæna tops by tying some moss around the stems close up to the foliage. The houses were in good shape and his stuff was looking well, although he has a great drawback in the shape of city water, which at times comes so thick that it leaves a coating of mud on the foliage of the plants. He generally manages to have a nice bunch of orchids in flower and this time was no exception to the rule. His cattleyas were in good shape and he has had a fine show of them during the winter. Azaleas, too, were covered with bloom, although they have been grown here for the past three years, thus proving that they can be successfully carried over here during our very dry summers, notwithstanding all the older gardeners to the contrary. The roses were looking quite well considering the season we have passed through. He finds Wooltons and Perles the most satisfactory as they can cut quantities of them when they start flowering. A climbing Perle planted in one of the benches has climbed over almost everything in the house. He says it will climb if it won't do anything else. He is a firm believer in the benefits of a "Flower show," but thinks they should be aided more by private subscriptions and special prizes as is done on the other side. I noticed some strong plants in 3-inch pots of chrysanthemums, and a glance over the labels showed them to be all prize win-

CHRYSANTHEMUM NIVEUS.

ning varieties; it looks as though he is laying his plans already for next fall's show.

I also called upon Mr. Waldbart and found him trying to make more room in his houses by placing soft stuff out in frames. His houses are in town and are kept in perfect shape. I noticed a nice lot of epiphyllum grown as standards, the stem being about 18 inches long. These when in flower make nice house plants and are easily carried over from season to season. There were also several fine lots of Lilium Harrisii, as well as a bench of flowering begonias which were covered with bloom and worth seeing.

In addition to the plants that he has sent to the World's Fair there are here seven or eight large specimens that are to go up in the spring. These plants are clean and well grown and would be a credit to any one sending them. They consist of latanias, phœnix and Seaforthia elegans. There is also a Euphorbia splendens that has been in his possession for 20 years. Mr. Waldbart is in favor of holding a fall show with several important changes from the previous ones, which if adopted will make them much more attractive and give better satisfaction.

Mr. Eugene H. Michel representing the Michel Plant and Bulb Co., has had John Mackey, Superintendant of the Berry—Horn Coal Company's yard arrested charged with attempted fraud by giving short weight. The Michel Plant and Bulb Co., have a contract with the Berry—Horn Co., for the coke used in heating their houses, and have been receiving coke from them daily for the past three months; they suspected the loads to be light but did nothing until complaints were heard from other sources, then they had all the loads weighed and found a shortage every time varying from 30 to 360 pounds. The law allows for a difference of 50 pounds in scales, but the City Inspector, however, after examining both scales was willing to swear there was not more than 10 pounds difference. Upon this evidence the arrest was procured. Prof. Trelease, of Shaw's Garden, received some coal from the same people, and learning what Mr. Michel was doing had his load reweighed and found a shortage of 200 pounds. The case is set for trial on the 24th of February and is being watched with much interest. R. F. T.

Chrysanthemum Niveus.

Among the many new claimants for public favor which made their appearance at the exhibitions of 1892 it is doubtful whether any other variety made quite so strong an impression as the subject of

our illustration. Its great size, charming shape and exquisite purity of hue make it admirable for exhibition purposes, while robust habit and strong stems, well clothed with good foliage, give distinct promise as a trade variety. We can not always give certain testimony as to the value of any flower without adequate trial, but it is safe to predict great things of Nivens as a white chrysanthemum of unusual value.

Mushrooms.

Referring to the statement on page 664 of our issue of February 2, that mushrooms in three weeks from spawning was probably the quickest time on record, Mr. W. A. Wright, Lansdale, Pa., writes us that he has gathered mushrooms in 18, 19 and 20 days from time of spawning. He adds that the beds were spawned August 30 and he gathered mushrooms from them September 17.

IN OUR LIST of cemetery superintendents we have named Mr. D. H. Rhodes as superintendent of the National Cemetery at Arlington, Va. This is not correct. Mr. Rhodes is landscape gardener for the national cemeteries and Arlington is his regular station. His P. O. address is Fort Myer, Va., (via.) West Washington, D. C.

Golden Returns.

200,000 ROSES 200,000

We offer well established, healthy plants in below named and many other sorts:

From 2-inch pots, $ 3.00 per 100; $30.00 per 1000
From 3-inch pots, 6.00 " 60.00 "
From 4-inch pots, 12.00 " 120.00 "
Not in excess of any one variety.

50,000 Hybrid Perpetual Roses 50,000

at $4 per 100; $40 per 1000, in 50 select varieties.

New and Rare Varieties at Special Rates given in our Wholesale List, now ready

WE NAME A FEW SORTS ONLY:

Aurora, Bosanquet, Comt. de Labarthe, Bon Silene, Cels, Devoniensis, C. Mermet, Etoile de Lyon, Hermosa, Mme. Cusin, H. M. Stanley, Malmaison, Marie Goillot, Mme. Lambard, Marie Lambert, Marechal Niel, Kruger, Niphetos, Mme. Jos. Schwartz, Safrano, Perle des Jardins, Sombreuil, The Bride, etc., etc.

For anything in the Florist line, or send your lists to be priced. Address

NANZ & NEUNER,
LOUISVILLE, KY.

I WILL OFFER CHEAP
FOR NEXT 30 DAYS,

The following Roses, rooted in December, and as fine and healthy stock as any grower can send out.

SEND FOR PRICES.

Bridesmaids,	**Richardias,**
Brides,	**Amaryllis** of sorts,
Mermets,	**Daybreak** carnations,
Perles,	**Geraniums,**
Sunsets,	**Smilax** and
Niphetos,	**Florists' Seeds.**

Address **E. HIPPARD, Youngstown, O.**

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST. . . . . .
ANCHORAGE ROSE CO., Anchorage, Ky.

ROOTED ROSE CUTTINGS
. . TESTIMONIALS . .
FROM NEW ENGLAND TO CALIFORNIA.

MASSACHUSETTS.

Daniel W. Davis, of New Bedford, says:
"The cuttings reached me in splendid condition. I had no difficulty whatever with them after potting. They have proved first-class in every way, both as to growth and bloom. It is certainly the cheapest method of securing young plants for your greenhouses."

RHODE ISLAND.

S. J. Reuter, of Westerly, says:
"I had no more difficulty with them after potting than if taken out of the bench here. It is by all means the cheapest method of securing young plants for your greenhouses."

NEW YORK.

Thomas Mansfield, of Lockport, says:
"The rooted cuttings reached me in splendid condition and have done equal to our own. I believe them to be the cheapest and best."

OHIO.

Gravett & Son, of Lancaster, say:
"Cuttings arrived fresh and nice. They did well after being potted and have given excellent results in growth and bloom. It is the cheapest method of securing young plants."

ILLINOIS.

Pillsbury & Gessler, of Galesburg, say:
"Cuttings were well packed and reached us perfectly fresh. Will need some more cuttings this spring. Please send prices and varieties as soon as ready."

KANSAS.

R. G. Ferguson, of Parsons, says:
"They have given me as satisfactory results both as to growth and bloom, as if they had been taken from two and one-half inch pots. In spite of the dry season they did finely, more especially the Brides."

IOWA.

J. T. Temple, of Davenport, says:
"The cuttings arrived in good condition and well-rooted, and I only lost five out of one hundred and fifty. If they always do as well as those received this year from you, it is decidedly the cheapest method of stocking up with good paying plants."

PENNSYLVANIA.

Harry Chaapel, of Williamsport, says:
"The cuttings arrived in first-class condition. I had no more difficulty with them after potting than if they had been taken from our own bench, and they have given satisfactory results as to growth and bloom."

MARYLAND.

William Bester, of Hagerstown, says:
"The cuttings arrived in very fine condition, and they gave great satisfaction."

CALIFORNIA.

J. Bolrard, Posen Station, says:
"Cuttings arrived in very good condition and I had no difficulty with them after potting. They were very satisfactory as to growth and bloom, and I think it the cheapest method of securing young plants for your greenhouses."

Send for Catalogues and Prices with Half-Tone Pictures of the New Roses.
KAISERIN AUGUSTE VIKTORIA AND WHITE LA FRANCE.
C. STRAUSS & CO., ✳ WASHINGTON, D. C.

PERLE ROSES.
ALSO BRIDES AND MERMETS.

No better stock in New York State. Orders solicited for April or May delivery, in 2½ inch pots; or in 4-inch pots June and July.

NIPHETOS, BON SILENE AND MME. HOSTE IN LIMITED QUANTITIES.

Salter Bros.,
42 W. Main Street, ROCHESTER, N. Y.

ROSES.

FINE PLANTS and ROOTED CUTTINGS

AMERICAN BEAUTY,	**METEOR,**
LA FRANCE,	*PERLE DES JARDINS,*
CATHERINE MERMET,	*WATTEVILLE,*
BENNETT,	*MME. CUSIN,*
BRIDE,	*BRIDESMAID,*
WOOTTON,	*NIPHETOS,*
GONTIER.	

Specially fine stock in the TWO MOST FASHIONABLE ROSES grown, METEOR and AMERICAN BEAUTY.

SEND FOR PRICES. **CHAS. F. EVANS & BRO.,** FRANKFORD, PHILADELPHIA, PA.
Mention American Florist.

ROSES. Clothilde Soupert. ROSES.
$6.00 PER 100.

Grand, healthy plants from 3-inch pots, are in splendid condition for Spring sales. We make this price to move them quickly. We want the room for Easter stock.

MERMET, NIPHETOS, BRIDE, GONTIER, WATTEVILLE and HOSTE, from 2-inch pots, $4.00 per hundred.

DAVID CLIFFE, Germantown, Phila., Pa.

ROSES.

TEAS . . . . . $30.00 per 1000
HYBRIDS . . . . . 40.00 per 1000
Healthy plants, in 2-inch pots.
Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.
Trade list on application.

Jacob Schulz,
LOUISVILLE KY.
Mention American Florist.

FORCING ROSES

All the old, and such new varieties as have been proved, kept in stock.

M. A. HUNT,
TERRE HAUTE, IND.
Mention American Florist.

What Rose is always in demand?
"AMERICAN BEAUTY."
Which is the only large Rose that can be had all the year round?
"AMERICAN BEAUTY."

WHAT NEW ROSE IS A FIT COMPANION TO BEAUTY?

"American Belle."

"AMERICAN BELLE"
has carried the highest honors wherever shown—New York, Boston, Chicago, Philadelphia, Cincinnati and elsewhere throughout the United States. . . .

Book your order NOW. $60 per 100; $400 per 1000. 25 at 100 rate, 250 at 1000 rate.

Ready April 15th, 1893. JOHN BURTON, Chestnut Hill, Philadelphia, Pa.

$80.00 THE ROSE $15.00

BRIDESMAID.

THE

PERMANENT-PINK,

NEVER-DEFORMED

MERMET.

OF IT

MR. T. J. SLAUGHTER writes from Madison, N. J.:

JANUARY 3, 1893.

* * * "It gives me pleasure to give the BRIDESMAID my hearty recommendation: from my experience with it this year I am convinced it will supersede the Mermet entirely, owing to its better color and greater market value. I intend to give it in future all the room I can possibly spare. I think growers will go for it strong another season."

Plants from 2½-inch pots, $15.00 per 100

SPECIAL OFFER of Rooted **CUTTINGS**, only in lots of one thousand each, price $80.00 per lot. Beautifully rooted; carefully packed.

FRANK L. MOORE,
CHATHAM, NEW JERSEY.

Roses of Rare Excellence; strong 1 and 2-yr., outdoor grown, budded and own roots. Leading Nurserymen call them "best ever seen." Shall we express sample?

	100	1000
Climbing, 2-yr., 3 to 5 ft., own roots	$8	$70
" 1-yr., 2 to 3 ft., own roots	7	60
Hyb. P., 2-yr., 2 to 4 ft., budded or own roots	9	85
" 1-yr., 1½ to 2 ft., " " "	8	75
Mad. Plantier, 2-yr., 2 to 4 ft., own roots	8	70
" " 1-yr., 1½ to 2 ft., own roots	7	60
Moss, 2-yr., 2 to 4 ft., budded or own roots	9	85
" 1-yr., 1½ to 2 ft., budded or own roots	8	75

Evergreens, 2, 3 and 4 feet, fine. Full Stock Fruit Trees, Ornamentals—Everything! Stark Bros., Louisiana, Missouri.

ROSES. ROSES. ROSES.

• YOUNG • ROSES. •

LA FRANCE, MERMETS, BRIDES, HOSTE, GONTIERS, NIPHETOS, METEORS.

Beauties, Brunners, Laings and Magna Chartas.

Write us for further information.

La Roche & Stahl 13th & Chestnut Sts., PHILADELPHIA.

MADAME CAROLINE TESTOUT.

The best rose of its color in existence. It has been fully tested in the New York market and

IT SELLS.

Healthy plants from 2½-inch pots now ready. Per 100, $25 00; per 1000, $200 00; 500 at 1000 rates.

ERNST ASMUS, West Hoboken, N. J.

ROSES

Fine, Healthy, 2¼-inch Pots.

Perles, Brides, Mermets, Niphetos, Papa Gontier, Hoste, Watteville, Cusin, La France, Albany, Wootton, at . $5.00 per 100, $45.00 per 1,000.
Meteor at . . . . . $6.00 per 100, $55.00 per 1,000.
Climbing Perle, at . . . . . $10.00 per 100.

John Henderson Co.,

FLUSHING, N. Y.

	Per 100	Per 1000
CARNATIONS, standard varieties	$1 60	$9 00
NEWER KINDS	$1.50 to 2 00	
COLEUS	75	6 00

Send for prices on Chrysanthemums, Alternanthera, Snow Crest Daisy, etc.

JOHN J. CONNELLY, Bryn Mawr, Pa.

COLEUS ROOTED CUTTINGS
The Best Twelve Bedders.
Also, Althernanthera Aurea Nana and differant Bedding Plants. For prices, address
C. F. SCHNEIDER, Oconomowoc, Wis.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

Do YOU WANT an alphabetical list of the chrysanthemums in commerce in America, with class and a brief accurate description of each one, and synonyms noted? You will find such a list in our new trade directory and reference book.

HARDY CUT FERNS?

Oh Yes, over

5,000,000.

I can supply you the year round with A1 goods. Also new Bouquet Green, Laurel festooning, etc.

H. E. HARTFORD,

18 Chapman Place, BOSTON, MASS

IF YOU NEED ANY

Cape Flowers, Immortelles, Grasses, plain or fancy **Baskets, Metal Wreaths, Letters, Doves,** or any other thing in the Florists' supply line, mail us your order.

REMEMBER WE ARE THE Leading Manufacturers of Wheat Sheaves and Baskets, and Importers of **Florists' Supplies.**

Catalogue on application.

ERNEST KAUFMANN & CO.,

113 N. 4th Street, PHILADELPHIA, PA.

H. BAYERSDORFER & CO.,

WHOLESALE

FLORISTS' SUPPLIES ONLY,

56 N. 4th Street,

PHILADELPHIA, PA.

Our new Catalogue is now out, free upon application.

MARSCHUETZ & CO.,

FLORISTS' • SUPPLIES,

23 & 25 N. 4th St., PHILADELPHIA, PA.

Send for Catalogue.

WHITE DOVES

FOR FLORISTS.

Largest and finest stock in the United States. Write for prices to

S. J. RUSSELL,

103 Van Winkle St., Jersey City, N. J.

AGENTS:

J. C. Vaughan, Chicago, Ill.
H. Bayersdorfer & Co., Phila., Pa

Fancy Dagger

FIRST QUALITY HARDY CUT FERNS, $1.25 per 1000. In lots of 5000 and upwards, $1.00 per 1000.

2,000,000

HARDY EVERGREEN CUT FERNS,

Especially for Florists' Use.

SPECIAL ATTENTION PAID TO SUPPLYING THE WHOLESALE TRADE

L. B. BRAGUE, Hinsdale, Mass.

Asparagus Plumosus Nanus.

CUT STRINGS: 6 to 8 feet long, 50 cents each. 10 to 15 feet long, $1.00 each.

In large or small quantities all the year round. The largest stock in the country.

W. H. ELLIOTT, Brighton, Mass.

THE CHICAGO CUT FLOWER EXCHANGE

We still have some choice Advertising Space left in the Exchange.

The Headquarters of the Chicago Florist Club is now in the Exchange, which will still further enhance its value as an advertising medium.

SPACE TO RENT ON BLACKBOARD, BY THE WEEK OR MONTH.

Exhibitors making Chicago their Headquarters during the World's Fair, can obtain Desk Room at the Exchange at a reasonable rate.

FOR TERMS ADDRESS

The Chicago Cut Flower Exchange,

45 Lake Street, Chicago.

Cape Flowers, new crop in best white quality ready for delivery, $1.25 the pound.

Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, always on hand, from 30-in. upwards, at 45c., 50c., 60c., 75c. and $1.00 each, according to length.

Supplies of all kinds, such as funeral sheaves Immortelles, Letters, Doves, Wire Designs, Satin bows and ribbon, foil and violet foil, Ornamental Grasses constantly on hand.

Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, in rich assortment.

Baskets of all styles, Plain and Fancy; also the latest designs in silver-plated Baskets and Jardinieres as **Easter Novelties.**

CATALOGUE to the Trade only, mailed free.

August Rölker & Sons

136 W. 24TH STREET,

NEW YORK, P. O. Station E.

We are the People!

Who? KOFFMAN,

Where? WALDEN, Orange Co., N. Y.

What? SMILAX

25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.

When? ALL THE YEAR AROUND.

Also Adiantum Cuneatum Fronds At $1.25 per 100.

And he pays the Express.

C. A. KUEHN,

(Successor to ELLISON & KUEHN),

WHOLESALE FLORIST,

1122 PINE STREET,

St. Louis, Mo.

A complete line of Wire Designs.

WM. ELLISON,

(Late of ELLISON & KUEHN),

WHOLESALE FLORIST,

AND FLORISTS' SUPPLIES,

1402 PINE ST., ST. LOUIS, MO.

H. L. SUNDERBRUCH,

WHOLESALE FLORIST

4TH & WALNUT STREETS,

Cincinnati, O.

DAN'L B. LONG,

COMMISSION • FLORIST,

495 Washington St., BUFFALO, N. Y.

FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.

Lists, Terms, &c. on application.

GEO. MULLEN,

WHOLESALE FLORIST,

Florists' Supplies Always in Stock.

17 CHAPMAN PLACE,

(Off School St., near Parker House),

BOSTON, MASS.

Orders by Mail, Telegraph, Telephone or Express promptly filled.

WISCONSIN FLOWER EXCHANGE,

WHOLESALE

Cut Flowers AND Florists' Supplies

131 Mason St., MILWAUKEE, WIS.

SMITH, The Florist,

GROWER OF

Fine Roses & other Cut Flowers

WHOLESALE AND RETAIL,

77 S. 7th Street, MINNEAPOLIS, MINN.

10,000 Nymphæa Odorata or White Water Lily Roots

FOR SALE.

Price, $5.00 per 100; $40.00 per 1000; or will exchange for seeds, plants or bulbs. For further particulars address B. L. CLARK, Randolph, Mass.

E. H. HUNT,
WHOLESALE FLORIST

79 Lake Street, CHICAGO.

	Per 100
Perle, Gontier, Niphetos	$ 4.00
Mermets, La France, Bride, Woottons	6.00
Meteors	10.00
Carnations, short	1.00
" long	2.00
" " fancy	2 50
Romans, Valley, Narcissus, Tulips	3.00
Violets, Adiantum	1 00
Callas, Harrisii	10.00
Smilax	15.00

Above prices in effect till receipt of next issue of this paper.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,

34 & 36 RANDOLPH STREET,

CHICAGO, ILL.

WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in

FLORISTS' SUPPLIES,

116 Dearborn Street, CHICAGO.

Store Closes Nights 9 P. M.; Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.

WHOLESALE GROWERS OF

CUT FLOWERS of ALL KINDS

and Dealers in FLORISTS' SUPPLIES.

CHAS. W. McKELLAR, Mgr.

In Chicago Cut Flower Exchange,

45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,

66 WABASH AVENUE,

Telephone 4786. CHICAGO, ILL.

T. J. CORBREY & CO.
Wholesale and Commission

FLORISTS,

45 Lake St., CHICAGO, ILL.

In Chicago Cut Flower Exchange. . . .

WHOLESALE FLORISTS
La Roche & Stahl

N. E. CORNER

13th & Chestnut Sts.,

PHILADELPHIA.

Mention American Florist

SAMUEL S. PENNOCK,
Wholesale Florist

REMOVED TO REAR OF 42 S. 16th ST.,

Philadelphia, Pa.

CUT SMILAX.
From Nov. 1st to May 1st our price for Smilax will be 20 cents per string. Quality first-class. Prompt attention to orders by wire.

J. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

Wholesale Markets.

Cut Flowers.

NEW YORK, Feb. 28.

Roses, Bon Silene, Gontiers	2.00@ 3.00
" Perles, Niphetos	2.00@ 4.00
" Mermet, Bride, Hoste	4.00@ 8.00
" Casin, Watteville	4.00@ 8.00
" Bridesmaid, La France	6.00@10.00
" Meteor	8.00@15.00
" Jacqueminot	15.00@30.00
" Beauty	25.00@75.00
" Hybrids	25.00@40.00
Carnations	.75@ 1.00
Valley, hyacinths, tulips	2.00
Daffodils	2.50@ 3.50
Harrisii	3.00@ 8.00
Violets	.50@ 1.25
Cattleyas	25.00@50.00
Mignonette	2.00@ 8.00
Smilax	15.00@25.00
Adiantums	1.00
Lilac (bunch)	1.00@ 1.25

BOSTON, Feb. 28.

Roses, Niphetos, Gontier	5.00@ 8.00
" Perle, Sunset, Wootton	6.00@10.00
" Bride, Mermet	8.00@16.00
" Meteor	15.00@20.00
" Beauty, Hybrids	25.00@75.00
" Jacqs	50.00
Carnations	1.50@ 2.00
Valley	1.00@ 3.00
Acacia	25.00
Cytisus (bunch)	.25
Heath "	.75
English primroses "	.25
Hyacinths	1.00@ 2.00
Daffodils, tulips	2.00@ 4.00
Violets	.50@ 1.00
Mignonette	4.00@ 6.00
Callas, Harrisii	10.00@12.00
Pansies	.75@ 1.00
Freesia	1.50@ 2.00
Smilax	17.00
Adiantum	1.00@ 2.00
Asparagus	50.00

PHILADELPHIA, Feb. 28.

Roses, Perle, Gontier, Niphetos	4.00
" Mermet, Bride, Albany	8.00
" La France	8.00@10.00
" Hoste, Casin, Watteville	4.00@ 6.00
" Bennett, Wootton, Guillot	6.00@ 8.00
" Meteor	8.00@10.00
" Beauties	25.00@40.00
" American Belle	40.00@50.00
" Brunners	40.00@50.00
" Laing, Magna Charta	25.00@40.00
Carnations	1.00@ 1.50
Mignonette	1.00@ 2.50
Violets	1.00@ 1.50
Valley	2.00@ 3.00
Daffodils	4.00
Tulips	4.00@ 5.00
Freesia	1.00@ 1.50
Callas, Harrisii	8.00@12.00
Adiantum	1.00@ 1.50
Asparagus	50.00@75.00
Smilax	15.00@20.00

CHICAGO, Feb. 28.

Roses, Perles, Niphetos Gontier	3.00@ 4.00
" Mermet, La France, Albany	4.00@ 6.00
" Bride, Wootton, Bennett	5.00
" Beauty	12.00@20.00
" Jacqs	15.00@25.00
" Hybrids	25.00@35.00
Carnations (short)	1.00
" (long)	1 50@ 2.00
" (fancy)	2.00@ 3.00
Callas, Harrisii	10.00@12.00
Romans Valley	3.00@ 4.00
Violets	.75@ 1.00
Daffodils	3.00@ 4.00
Tulips	3.00@ 4.00
Freesia	2.00@ 3.00
Marguerites	.60@ 1.00
Mignonette	2.00
Smilax	15.00@18.00

Peck & Sutherland,
Successors to WM. J. STEWART,

Cut Flowers AND Florists' Supplies

WHOLESALE.

67 Bromfield Street, BOSTON, MASS.

WHOLESALE FLORISTS,
N. F. McCarthy & Co.

JOBBERS IN . . .

. . FLORISTS' SUPPLIES,

FLORISTS' VASES.

ME

BRIDES

GONTIERS

CARNATIONS

ALWAYS ON HAND.

1 Music Hall Place,

BOSTON, MASS.,

HORTICULTURAL AUCTIONEERS. . .

Mention the American Florist when writing to advertisers on this page.

BURNS & RAYNOR,
49 West 28th Street,

NEW YORK,

WHOLESALE DEALERS IN AND SHIPPERS OF

Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE

FLORIST,

32 West 30th Street, NEW YORK.

Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN

CUT FLOWERS

51 W. 30th St., NEW YORK.

FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,

117 W. 30TH ST., NEW YORK.

The Oldest Established Commission House in N. Y. LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE

FLORIST,

111 WEST 30TH STREET,

NEW YORK CITY.

Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,

5 WEST 27TH STREET,

NEW YORK.

BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist

113 WEST 30TH STREET,

. . . NEW YORK.

The finest Roses, Violets and Carnations

Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,

Wholesale Florist

Careful Shipping to all parts of the country. Price list on application.

HENRY W. BAYLIS,
Wholesale Florist

940 BROADWAY,

. . . . NEW YORK.

WELCH BROS.,
Wholesale Florists,

NO. 2 BEACON STREET,

Near Tremont St. BOSTON, MASS.

The Seed Trade

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 11 to 16, 1883. Applications for membership should be addressed to Wm. Moggatt, chairman membership committee, Wethersfield Conn.

LATEST REPORTS from the mail seed trade would indicate considerable improvement over that of ten days ago.

PATENTS RECENTLY GRANTED:—Garden Tool, M. Powers, Lexington, Ind.; Seeder, O. Erickson, Cannon Falls, Minn.; Seeder, E. D. Mead, Phelps, N. Y.

News Notes.

CHILICOTHE, O.—Fire did $800 worth of damage to the greenhouses of Wm. Miller the night of February 10. No insurance.

MT. VERNON, ILL.—Mrs. I. Isaacs, whose greenhouse was burned out in December, has rebuilt and is rapidly stocking up and will be fully in line when trade opens.

KEARNEY, NEB.—The contemplated purchase of the Midway Floral Co., by F. Mitchell Green, was not consummated. Mr. Edwin A. Taylor is still in charge.

MT. VERNON, N. Y.—Matthew Dummett is just completing a new house 18x100, to be used this spring for bedding stuff, and later to be planted with carnations.

EVANSVILLE, IND.—Business has not been as active this year as formerly; cause evidently the extreme cold weather which has sadly interfered with the usual society gathering. Good stock has, however, been scarce and finds a ready sale at fair prices.

BALTIMORE.—In our report of the formation of partnership between Theo. Eckardt and M. Sommerville, the capital stock of the firm is given as $5,000, but we have been since informed by the interested parties that $5,000 was the amount paid in by Mr. Sommerville as special partner and not the total capital.

DECATUR, ILL.—Business good all season. Prices fair. Good stock sells well, mostly loose cut flowers. Nick Bommersbach is cutting some fine Perles and Albany, the latter not much in demand. Niphetos finds ready sale, but Perles are always sought after. Adam Balmer has recovered from his late fire and is rapidly getting stock in line for spring sales. Every indication points to a very successful season.

TERRE HAUTE, IND.—Business good. A few days succeeding the holidays it was quiet but the reaction was healthy and lasting. Prices fair, prospects for spring trade fine, and florists are getting ready for a successful season. For order and neatness, few places in the west can compare with Jno. G. Heinl's. By the way he is growing the Climbing Perle with great success and regards it a fine stock to bud other varieties on.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—By thoroughly competent young man in gentleman's private place as first or second gardener. Address D, care American Florist.

SITUATION WANTED—By a practical florist, with 15 years' experience; married, no children. A good place and treatment expected. Address FLORIST, care American Florist.

SITUATION WANTED—By a gardener and florist, commercial or private; first-class references, single, 38 years of age. State wages. Chicago preferred. Address J. J. box 68, Riverdale, Illinois.

SITUATION WANTED—By single, honest man, German, experienced in all branches of gardening, wishes permanent position in gentleman's place. References. W. St., care 183 Fulton St., Brooklyn, N. Y.

SITUATION WANTED—As florist and gardener, thoroughly understands all branches of the business; either commercial or private place. Good references from last employers. Address FLORIST, Mandell, Cook Co., Ill.

SITUATION WANTED—By young man, single, as manager or foreman of commercial place; thoroughly experienced in plants and bulbs. Best recommendations. Western preferred. Address J. H. MITCHELL, Crestline, Ohio.

WANTED—Practical florist; single man. Address, stating wages, etc., Box 161, Boise City, Idaho.

WANTED.—Who has from 100 to 150 Asparagus plumosus nanus in four to six inch pots, and how much? Address C. F. PLACE, Quincy, Ill.

WANTED.—A young man to assist in greenhouse and garden work, must be of good habits. With or without board. Address JAMES FROST, Greenville, Ohio

WANTED Practical florist, one that understands growing cut flowers and plants. State wages without board; references required. Address G, care American Florist Chicago.

WANTED A young man with some experience in greenhouses and a fair education. State wages per month including board. FLORIST, Box 353, Middletown, N. Y.

WANTED To buy a florist business near or in Chicago consisting of from 3 to 5 houses. Will exchange a farm of 120 acres in Kansas for above. Address X Y Z, care American Florist.

WANTED—A young man over 20 years of age to assist in general greenhouse work. Wages $15 to $20 a month with board. Address L, care Henry F. Michell, 1018 Market St., Philadelphia, Pa.

WANTED—A trucker; one who fully understands market gardening; must be of steady habits and sober. Married man preferred; will take single man if cannot get other. Address, stating wages wanted. Box 801, Paris, Ill.

WANTED—An experienced gardener fifty years old, not married, who has been employed by Ellwanger & Barry for 12 years, and can furnish good references; wants a private place at a moderate salary. WM. SCHOLAN, Waterdown, Ont.

WANTED—A young man for general greenhouse work; must be sober, industrious and have some knowledge of general greenhouse work; state experience, wages expected with board, age, etc. JOSEPH BANCROFT, Cedar Falls, Iowa.

WANTED.—A working foreman, thoroughly competent in all branches. Must be a good propagator, also able to take charge of building a new range of houses the coming summer. Address, stating wages. JOHN A. SALZER SEED CO., LA CROSSE, Wis.

FOR SALE—Old established greenhouses in Western health resort, 3,000 feet glass, splendid stock. For particulars, address E T, care American Florist.

FOR SALE—I will sell my rooted cutting business, greenhouses, etc., at a bargain; well established well advertised and growing. S. B. FIELD, Roselle, N. J.

FOR SALE OR TO LEASE—Eight greenhouses containing about 30,000 feet of glass within 12 miles of New York City. Enquire of A. HIBBINS, 159 Dodd St., E. Orange, New Jersey.

FOR SALE—Unequaled opportunity for a live florist to purchase a small, well-paying established business. For all particulars address Box 432, Haverstraw-on-Hudson, N. Y.

FOR SALE.—Paying florist business; large selected stock; good patronage, home and shipping; well located city south; will sell now or in July. Address G M J, care American Florist, Chicago.

FOR SALE—Paying florist's business, large selected stock, good patronage, home and abroad, ¾ acre lot, good dwelling, splendidly located; best reasons for selling. Address PROF. BAGLEY, Abilene, Kans.

FOR SALE—Riverview greenhouses, well stocked; 4,000 feet of glass, dwelling house, barn, etc., three blocks from business centre, one from street railway; also two acres of land and 6,000 pansies, wintered outside, ready for spring trade. A bargain to secure a well established business. Good reasons for selling. For further information address LEWIS REYNOLDS & SON, Box 285, Sarnia, Ontario.

FOR SALE.

An old established florist business with stock and good trade; or will take an energetic young married man with small capital as partner. Furnished residence on place which can be occupied by partner. Address for particulars M. Tritschler, Nashville, Tenn.

WANTED, A FOREMAN.

Capable of taking charge of a large establishment where cut flowers are grown. Must have had great experience and be able to furnish best of references. Send full information, giving age, whether married, copies of references, etc. A good position and a good salary to the right man. Position ready any time before June 1. Address

Grower, care American Florist.

ROSES. ROSES.

◎—PLANTS FOR FLORISTS.—◎

BRIDESMAID, strong, 2½-inch pot plants.....$12.00 per 100

	Per 100	Per 1000
METEOR	$4 00	$35 00
CLOTHILDE SOUPERT	4 00	35 00
PERLE DES JARDINS	5 00	40 00
CATHERINE MERMET	4 00	35 00
THE BRIDE	4 00	35 00
MARIE GUILLOT	4 00	35 00
NIPHETOS	4 00	

	Per 100
MME. HOSTE	4 00
HERMOSA	4 00
SOUV. DE WOOTTON	4 00
PAPA GONTIER	4 00
MME. PIERRE GUILLOT	4 00
ETOILE DE LYON	4 00
MALMAISON	4 00

General Collection of TEAS, BOURBON and POLYANTHAS in 50 leading varieties, $4 per 100; $35 per 1000.

	Per 100
GERANIUMS, in fine assortment, per 1000 $35,	$4 00
CANNAS, large flowered, French, in 15 varieties	8 00
" large flowered French, in 8 scarce sorts	15 00
" Madam Crozy	15 00
" Tall growing varieties	4 00
DAHLIAS, a choice collection, strong roots	8 00

	Per 100
CALADIUM Esculentum, 7½ to 10 in. circum	7 00
" " 6 to 7½ in. circum	5 00
" " 5 to 6 in. circum	3 50
BEGONIA Rex, in 12 named sorts	5 00
" Vernon	8 00
CARNATIONS, Edna Craig and Grace Battles	12 00
POPPIES, Bracteatum and Royal Scarlet	8 00

Full assortment of Hardy Shrubs, Vines, Herbaceous Plants, Paeonies, etc. Large supply Hybrid Perpetual, Moss and Climbing Roses, field grown.

CATALOGUES AND PRICE LIST FREE.

THE STORRS & HARRISON CO.,

. . . . PAINESVILLE, Lake Co., OHIO.

HYBRID PERPETUAL ROSES.

We offer strong 2 yr. old H. P. and climbing roses, of the varieties named below at 9c. for H. P's and 6c. for climbers F. O. B. Newark, New York. This is extra fine stock grown for us on contract.

Alfred Colomb, Anna de Diesbach, Am. Beauty, Bait. Belle, Caroline Desprez, Coquette Des Blanches Coquette Des Alps, Climbing Victor Verdier, Crested Moss, Climbing J. Margottin, Gen. Jack, Gen. Washington, Gem of Prairie, John Hopper, Jules Margottin, Mme. Plantier, Paul Neyron, Prince De Rohan, Persian Yellow, Queen of Prairie, Salet Moss.

L. L. MAY & CO.,

FLORISTS AND SEEDSMEN,

ST. PAUL, MINN.

Rooted Cuttings.

Carnations Hinze's White, Mrs. Fisher, Silver Spray, Jeannette, Grace Wilder, Fred Creighton, Mayflower, Century, Anna Webb, $1.50 per 100; $10 per 1000.

Orange Blossom, Portia, Hector, Florence, American Flag, $2 per 100; $15 per 1000.

Coleus, leading varieties, including the finest Yellow Coleus in cultivation. A new variety equal to Golden Bedder in color, and as good a grower as C. Verschaffeltii, $1.00 per 100; $8.00 per 1000.

Double Petunias in four finest varieties, $2.00 per 100.

Fuchsias, finest named varieties, $1.50 per 100.

Heliotrope $1.00 per 100.

Ageratum, Dwarf, White and Blue, $1.00 per 100.

500 at 1000 rates. Cash with order. 10 cents per 100 extra when shipped by mail.

JAMES HORAN, Florist,
BRIDGEPORT, CONN.

Mention American Florist.

FOR SALE.

Alternantheras Paronychioides Major, Rosea.

NEW strong plants of above at $3.00 per 100, 200 for $5.00, per 1000 $20.00.

Extra strong rooted cuttings of **Aurea Nana** 50c. per 100, by mail 60c. On account of room this could not be potted, all from September grown cuttings.

Finest fringed, camellia-flowered double **Petunia;** strong, 2-inch pots, $3.00 per 100; 200 for $5.00. Rooted cuttings of same, $1.50 per 100, free by mail; cash with order. Will book orders for **Achillea, the Pearl,** at $1.00 per 100, free by mail, ready for delivery about March 1st.

C. G. NANZ,
1007 Walnut St, Owensboro Ky.

C. H. JOOSTEN,

3 COENTIES SLIP, NEW YORK,

IMPORTER OF

PLANTS, BULBS & FOSTITE.

Catalogue of Plants and Book on Fostite sent on application.

Sweet Peas.

Full assortment of all the new and leading varieties.

BLANCHE FERRY: oz. 10c.; ¼ lb. 35c.; per lb. $1.00.

W. W. BARNARD & CO,
6 and 8 North Clark Street, CHICAGO

VERBENAS *MAMMOTH BEST SORTS, CLEAN, HEALTHY,*

$2.50 per 100; $20.00 per 1000.

Rooted Cuttings.....$1.00 per 100; $8.00 per 1000
Pelargonium Fred Dorner. .....$10.00 per 100
Canas, French Tubers.....$5.00 per 100
Alternanthera—P. major, A. nana. .....$3.00 per 100

Fine stock H. P., Tea and Forcing Roses.

JOSEPH HEINL, Jacksonville, Illinois.

100,000 MARIE LOUISE VIOLET RUNNERS.

Very healthy. All in cold frame. Free from any disease. The flowers can be seen every day at the store of H. Hession, 246 West 23d St., New York.

Price $5.00 per 1000, Ready April 1.

Order early and mention American Florist.

FD. BOULON, Sea Cliff, L. I., N. Y.

Mention American Florist.

CHRYSANTHEMUMS.

ROOTED CUTTINGS.

Lincoln, Ada Spaulding, Domination, L. Boehmer, Robullion and 20 other good market sorts, $1.50 per 100; Jessica and Ivory, $2.50 per 100. Ready for delivery January 15th.

Address **J. G. BURROW, FISHKILL, N. Y.**

WE SELL SEEDS

TO FLORISTS AND DEALERS.

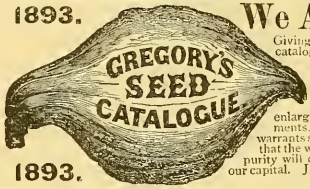
WEEBER & DON,

SEED MERCHANTS AND GROWERS,

114 Chambers St., New York.

Catalogues on Application.

1893.



1893.

We Are The Only Firm

Giving to customers cash discounts on orders. We alone catalogue that best of all bush beans, the Warren, and that best of all early peas, the Excelsior. No other Seed Catalogue, of America or Europe, contains so great a variety of several of the standard vegetables, and, in addition, are many choice varieties peculiarly our own. Though greatly enlarged in both the vegetable and flower seed departments, we send our catalogue **FREE** to all. The three warrants still hold good, and our customers may rely upon it, that the well earned reputation of our seed for freshness and purity will continue to be guarded as a most precious part of our capital. J. J. H. GREGORY & SON, Marblehead, Mass.

HULSEBOSCH BROS.,

BULB AND PLANT GROWERS,

OVERVEEN, near Haarlem, HOLLAND.

Prices on application for the coming season of

ROMAN HYACINTHS,	PAPER WHITE NARCISSUS,
LILY of the VALLEY,	HARRISII LILIES,
LIL. LONGIFLORUM,	TULIPS,
DUTCH HYACINTHS,	CROCUS,
SPIRAEAS,	ROSES, ETC., ETC.

☞ Spring Catalogue now ready. ADDRESS

A. HULSEBOSCH,

P. O. Box 3118. Warehouse 58 West Street, NEW YORK CITY.

BENJAMIN RIMBAUD, BULB GROWER,

Quartier du Temple, Toulon, var, France.

Cable address **Benrimbaud, Toulon.**

The largest cultures in the South of France, of **WHITE ROMAN HYACINTHS,** Narcissus Paper White grandiflora, N. Double Roman, N. **Double Von Sion,** true pure yellow, and other Daffodils. **Lilium Candidum,** the largest bulbs. Freesias. Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A. Double Rosette the earliest, etc. Prices on application.

Send for Catalogue of

JAPAN BULBS, SEEDS, AND SHRUBS.

ARAUCARIAS, AUSTRALIAN Palm Seeds,

CALIFORNIA BULBS AND SEEDS to

H. H. BERGER & CO.

ESTABLISHED 1878. SAN FRANCISCO, CAL.

G. J. MOFFATT,

Manufacturer of

PAPER BAGS AND ENVELOPES

Special attention given to

Seed Bags and Catalogue Envelopes.

NEW HAVEN. CONN.

SPHAGNUM MOSS. *CLEAN, DRY, FINE,* 1 Bale $1.25; 3 Bales $3.50; 10 Bales $10.00.

JOHN A. SALZER SEED CO., La Crosse, Wis.

Please mention the AMERICAN FLORIST every time you write to an advertiser.

A NEW MUSHROOM

Mushroom Culture at the Doors of Everyone.

This new mushroom, obtained by Boulon, Florist, is the only one that has supplied the New York market and Delmonico from June until the end of Oct., 1892, daily.

Spawn offered for sale from March 15 in baskets of 5 lbs. Each shipment will be accompanied with directions for care and culture.

PER BASKET $5.00, CASH WITH ORDER.

Write for price on larger lots. I decline to send C. O. D.

FD. BOULON,
Sea Cliff, L. I., N. Y.

TUBEROSES

We offer fine Tuberose Bulbs at $10.00 per 1,000. Samples on application.

L. L. MAY & CO.,
ST. PAUL, MINN.

HEADQUARTERS FOR WATER-LILIES

SEED TUBERS AND PLANTS.

Place your orders early if you wish to secure good stock of charming yellow Water Lily, N. Chromatella plants. 1st size, $1.00 each, $10 doz.; 2d size, 75c each, $8.00 per doz. Also, the new French and other new hardy varieties. Send for price list.

Wm. Tricker, DONGAN HILLS, NEW YORK.

CLEMATIS.

	Doz.	Hundred
2 Year Choice Assortment.....	$3.00	$25.00
1 " " "	2.00	15.00
H. P. Roses, Choice named kinds....	1.50	10.00
Monthly " " " "	1.25	8.00
Daisy Snowflake, strong plants.....	.50	3.00
Dahlias, field grown, choice named..	1.25	8.00

F. A. BALLER,
BLOOMINGTON, ILL.

Mention American Florist.

Double White Primrose

produces large quantities of firm white flowers, (valuable for all kinds of cut flower work), every florist should have it; 2, 3, 4, 5-in. pots @ $8, $10, $12 and $15 per 100 plants in full bloom.

Large assortment of the best Roses, Carnations, Chrysanthemums, M. H. Fern, Coleus, Violets, Geraniums, etc., for florists use. Send for trade price list to

HENRY SMITH,
130 Monroe St. Grand Rapids, Mich.

Eucharis Amazonica.

Referring to the inquiry by "Buffalo" on page 710, I use soil which is two parts loam and one part leaf mold and manure with an addition of charcoal to keep it open. I find the plants do well when partially shaded and in a temperature of 65° to 70°, rising to 80° in summer. I give them a good deal of water with the exception of four to six weeks in autumn. The bulbs are planted deep, in large pots. Where grown in large quantities the bulbs may be planted out in beds with bottom heat. Liquid manure may be given after the flower scape appears. If placed in a cooler house when flowering the blossoms will have a better substance and last longer. When favorably situated, old established plants will bear two or three crops of flowers in the course of a year. CHAS. F. SCHNEIDER.

Oconomowoc, Wis.

In answer to "Buffalo," I give this as our method when in England and growing for Covent Garden. Here is a house 14x100 heated with 4-inch hot water pipes laying flat, and running up the sides of house, a 4-inch brick wall, 4 feet from greenhouse wall the whole length. Now, right above the pipes plant stephanotis and run your vines lengthways of house, about 16 inches apart. Build a staging over pipes, but not tight, and set your eucharis on them. Now plant gardenias in the center bed. I am supposing your eucharis are dried off and you are now starting them. Syringe often, but not heavy. Keep this up till they show spikes, then give a watering three times a week with liquid manure prepared as follows: To a barrel of water add about a peck of fresh cow manure, two quarts soot, and one quart of lime. The lime will purify the soil, the soot will put color into the foliage, and you will get better results.

When the plants are done flowering take them out of the house and lay them down with their bulbs to the north. Then remove a pane of glass and put your stephanotis outside also. These two and gardenias will do well together. When well dried off bring the eucharis bulbs to potting bench, shake out and put 4 or 5 in an 8-inch pot, and don't shift again for that season. Give them two parts yellow loam, one part peat, one part sand and one part well-rotted manure. Water sparingly and syringe often, but not heavy. When they begin to show signs of flower spikes give manure water to which has been added a little soot and lime.

With this method we had grand success, and I see no reason why it would not work here, with a temperature of 60°.

Mt. Clemens, Mich. JAMES TAYLOR.

TUBEROSES.

We are headquarters. Per 100. Per 1,000
1st size Dwarf Pearl $1 50 $12 00
2d size " 80 6 50
1st size Tall Pearl 1 20 10 00
Giantoll, extra large, finest sorts 1 25 12 00

H. G. FAUST & CO.,
64 and 66 N. Front St., PHILADELPHIA, PA.
WOODLAWN FARMS, 1,300 ACRES.

TUBEROUS BEGONIAS.
Tubers, separate colors, Red, Yellow, White, per 100, 6.00; Mixed, $5.00.
Seedlings, ready in April, will make fine large plants, blooming as well as Tubers the first season only not as early. When you buy those seedlings, grown from the very best seed, you can select some extra good ones for next seasons early blooming. By mail, per 100, $3.00; mixed, single, $2 50.
BRAUER & RIGHTER,
McConnellsville, Ohio.
Mention American Florist.

The three leading Florist Flowers:
CHRYSANTHEMUMS, CARNATIONS AND ROSES.
ALL THE NEW AND SELECTED STANDARD VARIETIES. . . .
My stock of all are as fine as can be produced at reasonable rates.
Complete list of these will be mailed to all applicants in the trade.
JOHN N. MAY, Summit, N. J.
Mention American Florist.

ROZY ANNAS.
WE ARE HEADQUARTERS . . for all the Novelties, and in addition control EXCLUSIVELY several grand varieties which we now offer for the *first time*. We will not be undersold on any of the list.
J. C. VAUGHAN,
New York: CHICAGO.
12 Barclay Street. P. O. Box 688.
Greenhouses: Western Springs. . . .

Siebrecht & Wadley,
ROSE HILL NURSERIES,
NEW ROCHELLE, N. Y.
Palms, ORCHIDS, Roses,
and New Plants.
FRESH DRACAENA CANES NOW READY.

ORCHIDS.
The Finest Stock in the World.
SANDER'S, ST. ALBANS, ENGLAND.
Thirty minutes from London.
Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City.

Orchids Cheap as Good Roses.
BRACKENRIDGE & CO.,
Established 1854. Govanstown, Md.
PRICE LIST FREE.
1,000,000 CANE STAKES

E. G. HILL & CO.,
Wholesale Florists,
RICHMOND, INDIANA.

Write for wholesale list.
MICHEL PLANT AND BULB CO.,
ST. LOUIS, MO.

DO YOU WANT
ALTERNANTHERAS rooted for $1 per 100; $8 per 1000
Per 100
COLEUS, 2 and 2½-in. pots . . . . . $ 4.00
GERANIUMS, single red, 2 & 2½-in. pots, mxt. 3.50
" double red, 2 & 2½-in. pots, mxt. 3.50
" in 3 and 3½-in. pots 5.00
BEGONIAS, stock plants, 4 and 5-in. pots. . . 12.00
Rex and other best varieties.
If so, order soon of the
ELGIN ROSE CO.,
TELEPHONE 8.
519 Chicago Street, - - ELGIN, ILL.

VERBENAS.
Mammoth, clean, strong, well assorted, transplanted, $1.00 per 100, $8.00 per 1000. Lots of them ready now. Rooted Cuttings $6.00 per 1000. Must have room. Cheap; speak quick. Cash with order, or C. O. D.
W. B. WOODRUFF, Florist,
WESTFIELD, N. J.

CANNAS
CHRYSANTHEMUMS.
Lowest Prices for Choice Stock. List Free.
T. H. SPAULDING, Orange, N. J.

BY THE **THOUSAND.**
Araucaria excelsa, Aspidistra, Palms, Phormiums, Laurel, Bays, Crowns and Pyramids of all sizes.
Packing free for Cash with order.
THE NURSERIES. JULES DE COCK.
LEDEBERG, near Ghent, BELGIUM.
A Specialty Bulb Begonias, extra vars. at $3 per 100.

MEECH'S TUBEROUS BEGONIAS.
The Finest Strain in Existence.
For Prices see American Florist for January 26th, 1893
SEED ALL SOLD.
Catalogue about March 15th.
F. J. MEECH & SON,
Charlevoix, Mich.

THE NEW CANNAS,

MME. CROZY, STAR OF '91, ETC.

These are probably the most profitable novelties that can be handled this season. If you sell pot plants nothing that you can handle will sell so well and pay so good; this ought to make very profitable stock for you to start and pot on; it will sell very rapidly. When in bloom it only requires to be seen to sell and nice plants should be readily retailed at from 50 cents to 75 cents each; nothing that you could handle would afford you as satisfactory a profit. Dormant roots should be secured now, which can be forwarded at very little expense and started into growth and potted. This is the time to start the dormant roots; in starting them do not pot them, but put in damp Sphagnum moss, placing them in some warm spot; the Sphagnum furnishes moisture enough to start them into growth, but it does not hold water enough to cause them to decay. They not only occupy less room, but they start better in this way, than if potted first. When well started they should then be potted.

MME. CROZY AND STAR OF '91 make splendid pot plants and no plant that we know of, unless it be Tuberous Begonias, makes as much display in the greenhouse. It is a plant that can be recommended to your customers with the greatest confidence and as it can be bought very cheaply this season, we think it the most profitable novelty that can be handled by any Florist who sells pot plants. These Cannas were offered for the first time last year in any quantity and had an unprecedented large sale, nothwithstanding the fact, that the price at which they were offered, both wholesale and retail, was almost prohibitory to the average buyer, as they retailed last year at $1.00 each, and could not be bought for less than $60.00 per hundred wholesale, which placed them beyond the reach of the average buyer, but notwithstanding this high price, very large quantities were disposed of, but now, that they can be offered at reasonable prices, those who do not secure stock at once and get them in shape for spring sale will miss it, as on account of their high price last year, they were not within the reach of many, and this season in most localities they will be actual novelties as much as if they had never been offered before anywhere. If you have found, heretofore, that Cannas would not sell, do not think because of that, these would not. The flowers are so large and they bloom in such small pots that they have revolutionized Canna growing. They are not only among the very finest plants for bedding, and will be in great demand by those who desire something choice and rare to vary the monotony of out-door gardening, but they also make elegant plants for the conservatory, both summer and winter; in fact, one of the finest plants for conservatory decoration there is to-day. Every shoot blooms, and as often as a truss of blooms is past its prime, another shoot pushes out beyond it, and each stem blooms three, four, and five times in succession; as the plants throw up numbers of shoots, they are a mass of most gorgeous bloom constantly. We have never offered a plant that has given such unequaled satisfaction, and for which there has been such a demand as there has been for these new Cannas. Heretofore, we preferred to wait before investing in French Cannas until something was produced of intrinsic merit, pronounced enough in character to make it really valuable. Having satisfied ourselves of the value of these novelties beyond all question, we invested in them very heavily, and we have now by far the largest stock of these in the country. Park and Cemetery Superintendents and florists generally should make large plantings of this stock, which will make a fine display for them, and the increase of the stock will be one of the best investments that can be made for another year.

MME. CROZY.—Flowers flaming scarlet, bordered with gold, a marvelous combination of colors, having all the delicacy and beauty of the rarest orchid. As a rule, the more valuable the variety, and the nearer it reaches perfection, the less vigorous it is, but in this case we have one of the strongest and most vigorous growing plants that has been produced in the Canna line so far. This Canna is one that every one can succeed with, as it will grow in the open ground as readily and easily as the common varieties of Cannas, which have been so largely used in sub-tropical gardening. These plants produce all the wealth and richness, and the tropical luxuriance of foliage of the common kinds, added to which is the gorgeousness of their flaming panicles of bloom, which are borne in immense heads at the terminus of every shoot. They produce a very much greater effect than gladiolus, being very much larger. In order to give an idea of the large size of these flowers we have had a painting made, showing the actual size of the flowers and their beautiful coloring; we will be pleased to send this free to any who may not have received it; it is no exaggeration whatever, giving the actual size and the vivid and beautiful coloring of Mme. Crozy. When the large size of the flowers and the large heads of bloom are taken in connection with the freedom with which it blooms, it makes one of the most attractive plants for bedding that it can be possible to conceive of.

STAR OF '91.—More dwarf than Mme. Crozy and valuable on this account. A mass of scarlet when in bloom, but the individual flowers are nothing like as perfect as Mme. Crozy. It is an elegant pot plant and will bloom in the house in the winter splendidly, for which purpose it is admirably suited; as a pot plant for florist's sale, it bids fair to eclipse anything that has been offered for years, as its attractiveness and ease of culture, certainty of doing well, etc., make it a plant a florist can recommend, knowing it will please the buyer every time.

GEOFFREY ST. HILAIRE.—By far the best of the dark-leaved varieties among the new seedling Cannas. Without taking into consideration the flowers of this variety, it would still be by far the best dark-leaved Canna, but when the large size of the flowers is taken into consideration, coupled with the richness of the dark maroon colored leaves with a dark metallic or bronze lustre, it will be appreciated by all lovers of rare and valuable plants. Flowers light salmon-scarlet.

FRANCOIS CROZY.—This variety is identical with Mme. Crozy in habit and general style of growth, but the flowers are bright orange, bordered with a narrow edge of gold, one of the most desirable shades that could be secured. The plants are somewhat more dwarf than Mme. Crozy, and are fairly covered with flowers.

PRICE, STRONG ROOTS, $15 00 PER 100; $125 00 PER 1000.

☞ See our adv. of Novelties in Cannas in last issue.

F. R. PIERSON COMPANY,

TARRYTOWN ON THE HUDSON, NEW YORK.

Crude Oil for Fuel.

Crude oil has all the advantages of natural gas without the danger of the supply giving out (as the latter has here several times). But the apparatus must be put in right. If there is no error here this fuel is sure to give satisfaction. Around Detroit we use what is called the "Hydraulic pressure" plan. The tanks are placed in the ground, out of sight, in any convenient place, and a large cask placed anywhere over the boiler, so that it is higher than the fire box.

[We judge our correspondent to mean that the cask is given a position higher than the fire but at some little distance from it, as it would certainly be unsafe to place it directly over the boiler. ED.]

Those who have city water, run a pipe to the bottom of the oil tank, which forces the oil out at the top, through a pipe line into the burner. When the tank is nearly empty the wagon or car as the case may be, comes along, we open a pipe from the bottom of the tank, which discharges the water into the sewer, and the oil goes in, through a pipe on top.

There are numerous florists, factories and private houses here that now use crude oil and it has proved to be all the way from 25 to 50 per cent cheaper than coal. Even if the cost was 25 per cent. higher, it would be as cheap if not cheaper, as it saves labor, dirt and inconvenience.

For florists it seems just the thing, as you have a fire when you want it, no raking out of cinders to build new fires, no flues to clean every day, and no coal or ashes to handle. (I clean my flues about once a month).

I have an automatic regulator which keeps the same pressure on my boiler all the time. All I do is to pump water about 8 p. m., set the regulator and do not see my fire again until 7 the next morning. Then pump water again, and set it for the day. Of course if the sun is out, I shut off the pipes and fire altogether if necessary.

There are six florists here that use oil, and several more are talking of using it next year. The main trouble used to be the watching of the fires, as the pressure is liable to get too high or too low. In either case it will not burn properly. If too high it is liable to blow out the fires, if too low it will be wasting oil, and clog up the flues and chimney.

I also find I do not need so many pipes in my houses as with coal, and can heat twice as many houses with the same boiler. I use a 15 horse-power horizontal steam boiler. GUS KNOCH.

Woodmere, Mich.

Azalea Indica

In bud or bloom, from 75c. to $1.50 each.

LILIES FOR EASTER,

HARRISII, LONGIFLORUM,
CANDIDUM, RHODODENDRONS.

SEND FOR PRICES.

WILLIAM A. BOCK,
NORTH CAMBRIDGE, MASS

CANNA TUBERS.

Robusta Perfecta	$8 00 per 100	
Emile Le Chire	2 50	"
Eldorado	5 00	"
Jules Crotien	5 00	"
Hippolite Flandrin	5 00	"

Large and sound, 25 of any variety, for cash.

W. A. LEE,
BURLINGTON, VT.

ROOTED . . . .
CARNATION
. . . CUTTINGS

GRACE BATTLES, BUTTERCUP,
GOVERNOR RUSSELL, ANGELUS,
EXCELSIOR, CÆSAR,
PEARL, EMILY PIERSON,
THOS. CARTLEDGE, THE TWO
DAYBREAK, CORONETS.

And most of the other new and old kinds now ready.

C. J. PENNOCK, "THE PINES" KENNETT SQUARE, Chester Co., PA.

SEE OUR PRICE LIST

in special carnation number of Jan. 19th, or address

EDW. SWAYNE, Carnationist,
. . . Kennett Square, Pa.

Rooted Carnation Cuttings.

WHOLESALE PRICE LIST NOW READY,

Containing a full list of best new and old sorts, including the Prize takers at MADISON SQUARE and PHILADELPHIA.

Address **H. E. CHITTY, Paterson, N. J.**

"CHRYS-COLA"

Rooted Cuttings

CHRYSANTHEMUMS.

L. Boehmer, L. Canning, Excellent, Puritan, Gloriosum, G. P. Rawson, Mrs. F. Thomson, Mrs. Fottler, 25c. per doz., $1.75 per 100.

COLEUS in ten best varieties.

SEND FOR LIST.

S. B. FIELD, Roselle, N. J.

Mention American Florist.

SPLENDID STOCK.

			Per 100
Alternantheras P. Major, nuren nana	2-in. pots,		$2.00
Begonias, flowering sorts	2½-in.	"	4.00
Coleus, in 12 splendid sorts	2-in.	"	2.50
Cyclamen, in bud or bloom	3½-in.	"	8.00
Chrysanthemums, 40 splendid sorts	2-in.	"	3.00
Dahlias, large roots, 36 varieties		"	5.00
Geraniums, double and single sorts	2½-in.	"	4.00
" silver leaved sorts	2½-in.	"	4.00
" ivy leaved sorts, including Jeanne d'Arc	2½-in.	"	4.00

HANS NIELSON, St. Joseph, Mo.

ASTER SEED

Mary Semple, (Pink), and Semple's White (white), mixed. Finest strain on the market. Price, $1 per pkt., $5 per oz.

JAMES SEMPLE, FLORIST
Box 2. BELLEVUE, PA.

A RARE TIGER FLOWER

TIGRIDIA VAN HOUTTEII.

Grows about 2 feet high and bears in long succession 15 to 25 erect open bell shaped lilac and purple flowers an inch and a half wide. First discovered in Mexico about 20 yrs. ago, but never before distributed for cultivation. Strong flowering bulbs by mail, 75c. doz., $4 per 100. Many other choice Mexican bulbs.

F. H. HORSFORD,
See next week's offer Charlotte, VT.

CARNATIONS

ROOTED CUTTINGS.

Puritan, Aurora, Golden Triumph, Grace Darling, Daybreak, Pearl, White Wings, Lizzie McGowan, Louise Forsch, W. F. Dreer, J. R. Freeman,
and many other varieties; fine, healthy stock, ready January and after.

HYBRID PERPETUAL ROSES

500 Paul Neyron, strong plants....$10.00 per 100.
20 other leading varieties ....$10.00 per 100.
$80.00 per 1000.

Send for price list.

WOOD BROTHERS,
Fishkill, N. Y.

ORANGE BLOSSOM
CARNATION.

One of the leading new varieties, and an immense bloomer; received a Certificate of Merit in 1891; color Pink, Edged White.

Rooted Cuttings, $3.00 per 100; $25.00 per 1000.

MAY FLOWER, splendid variegated, $2.50 per 100.
THE JENNINGS STRAIN OF PANSIES, trade packet, 2000 seeds, $1.00. Fine, stocky plants, small, 60c. per 100 by mail; $5.00 per 1000 by express.

E. B. JENNINGS,
Lock Box 254. SOUTHPORT, CONN.

Rooted Cuttings, Carnations,

Lizzie McGowan, $20.00, Grace Wilder, $12.50, Silver Spray, $15.00, and Hinze's White, $12.50 for one thousand of each.

COLEUS, $8.00 for one hundred. Fuchsias (choice varieties) $5.00 for one hundred.

GERANIUMS, Gloire de France (new French importation) $30.00 for one thousand.

A. J. VREELAND,
JERSEY CITY, N. J.

ROOTED CUTTINGS OF
CARNATIONS.

LEADING VARIETIES.

S. I. BUNTING, 58th St. & Elmwood Ave., Phila., Pa.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

CARNATIONS ✻ AHEAD.

You want the best in the market! We have them, 16 Novelties of '93, and all the STANDARD VARIETIES! Send for our complete Price List.

GEORGE HANCOCK, Grand Haven, Mich.

Florists! ✻

Before you buy send for our Descriptive Trade List of

✻ **Carnations and Coleus**

We grow Rooted Cuttings only, and well rooted ones, with clean, healthy foliage. No "carnation rust" on our place. All the best varieties—you want a few of the new ones.

ALEX. McBRIDE,

. . . . ALPLAUS, N. Y.

W. R. SHELMIRE,
Carnation Grower

AVONDALE, CHESTER CO., PA.

Send for price list of Rooted Cuttings.

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

Mention American Florist.

CARNATIONS

ROOTED CUTTINGS.

Send for Price List of all the leading varieties.

WM. SWAYNE,

P. O Box 226. KENNETT SQUARE. Chester Co., Pa.

ROOTED CUTTINGS

Of the Best Old and Most Promising new varieties of

CARNATIONS.

Write for a catalogue and send list of wants for an estimate.

J. J. Styer,
CONCORDVILLE, PA.

ROOTED CARNATION CUTTINGS.

NOW READY.

Of the best old and new varieties now in cultivation, in small or large quantities. Send for estimate of wants or price list.

ISAAC LARKIN, Toughkenamon, Pa.

SEND FOR A COPY

—OF OUR—

TRADE DIRECTORY

AMERICAN FLORIST CO., CHICAGO.

ROOTED CUTTINGS.

SEND FOR LIST.

CARNATIONS.

GOOD STOCK. GOOD CUTTINGS. GOOD VARIETIES.

FRENCH CANNAS.

Standard sorts; good roots; nothing cheap but the price, $4.50 per 100; $36 per 1000.

AZALEA VERVÆNIANA.

The prettiest one that grows. Good sized small plants at $10.00 per 100. **Correspondence solicited. Inspection invited.**

L. B. 496. **ALBERT M. HERR, LANCASTER, PA.**

Orders Booked Now for My Specialties

FOR 1893.

New Jersey.—A scarlet Carnation hard to beat.....$12.00 per 100

Old Rose.—Old rose pink Carnation. .....$12.00 per 100

Nellie Bowden.—Pure bright yellow Canna.....$60.00 per 100

READY IN FEBRUARY.

Other varieties of Carnations, both old and new

JOHN McGOWAN,

• • • • • • ORANGE, N. J.

CARNATIONS!

Study my WHOLESALE LIST of Rooted Cuttings . . . before ordering. . . .

F. M. PENNOCK,

Bloomfield. Charles Town, Jefferson Co., W. Va.

CARNATIONS.

ALEGATIERE, GRACE WILDER, LIZZIE McGOWAN, PORTIA, PRES GARFIELD, and SILVER SPRAY. Strong plants.

From 2-inch pots, $3.50 per 100; $30.00 per 1000. Save express by buying near home.

ROOTED CUTTINGS OF THESE VARIETIES ON FOUR WEEKS NOTICE, at $15.00 per 1000.

NAGEL GREENHOUSES,

MINNEAPOLIS, MINN.

ROSES AND CARNATIONS.

The Largest and Finest Stock in the Northwest ever offered at the following prices:

ROSES—Perles, Hoste, Sunset, La France, Mermet, Bride, C. Soupert, Niphetos, from 2½-inch pots, $4.00 per 100
Mme. Watteville, Albany, Pierre Guillot, Meteor, from 2½-inch pots ..... 5.00 per 100
American Beauty, from 2½-inch pots..... 7.00 per 100

CARNATIONS—Silver Spray, Lizzie McGowan, Hinze's White, Hector, Portia, Garfield, Grace Wilder, Fred. Creighton, Mrs. E. G. Hill, from 2-inch pots ..... 3.00 per 100
Rooted Cuttings of all varieties offered..... 2.00 per 100

Cut Flowers, Roses, Carnations Lilium Harrisii and Smilax at lowest market prices. Telegraph orders promptly attended to. CHRIST HANSEN, Wholesale Florist, ST. PAUL, MINN.

ROOTED CUTTINGS of CARNATIONS

By the Wholesale.

Ready now. This is the best time for intending buyers to supply themselves. offer them at moderate prices. Send for Price List. Address

JOSEPH RENARD, Unionville, Chester Co., Pa.

VIOLETS.

MARIE LOUISE RUNNERS

Healthy Stock. Good Plants.

ANDREW WASHBURN,

P. O Box 1125. BLOOMINGTON, ILL

Carnations in California.

In a communication to the American Carnation Society, read at the Pittsburg meeting, Mr. C. J. Haettel, Redondo Beach, Cal., gave results attained by planting a large number of varieties of carnations on new ground, all the sorts having been obtained from the east in April with a view to testing their merits in his locality. He stated that they had all been grown in the open ground, about one-fourth mile from the ocean, with no protection. The results obtained were as follows:

Portia, flowers fair size and shape during September and October, later on small and split.

Hinze's White, fair size and good shape during fall and spring, burst badly during the season.

J. R. Freeman, of no value in this locality.

Anna Webb, good, free, perfect shape.

Constancy, worthless, splits, no vigor, poor color.

W. F. Dreer, vigorous, fine in early fall, flowers very large, perfect shape, but cannot stand bad weather.

Thos. Cartledge, vigorous, free, of excellent shape and very valuable.

Hector, no value, splits, weak stems.

Daybreak, a fine weather carnation, splits, stems always flat on the ground, of no merit here for open ground culture.

Grace Darling, weak constitution, splits, no value here.

Aurora, also worthless.

Puritan, flowers small, poor shape, not freely produced.

Pearl, not suited to this section.

Edwardsii, fine for summer and fall.

Pres. De Graw, very vigorous, free, but rather small.

M'lle Carle, weak, splits, not freely produced.

Fred Creighton, May Queen, Nellie Lewis, all three weak, flowers imperfect.

The above named varieties, Mr. Haettel stated had been grown under entirely different conditions from those under which they would be grown in the east. They had been planted about 15 inches apart in the rows, pinched twice, irrigated about once a month in summer and fall, and in winter no water used. They had been given no support and had to take their chances.

TUBEROUS BEGONIAS.

Griffin's unequalled strain. The only Begonias offered that are grown out doors in America. Two first-class certificates at the last meeting of the Society of American Florists. Descriptive list free.

$6.00 per 100, $50.00 per 1,000 for first quality, large tubers, in separate colors.

This quality is better than Imported Tubers at the highest prices.

J. WILKINSON ELLIOTT,
PITTSBURG, PA.

New and Rare Plants
ORCHIDS, ETC.

A large collection of Hothouse and Greenhouse Plants, carefully grown at low rates.

A collection of the most beautiful Fancy Caladiums ever offered. Pedargoniums, Etc.

Peonies—All the finest old and new.

Orchids. A very extensive stock; East Indian, Mexican, Central and South American, Etc.

Hardy Perennials, Roses, Clematis, Phlox, Etc.

New and Standard Fruits; rare and beautiful Trees and Shrubs, Evergreens, Etc.

CATALOGUES ON APPLICATION.

JOHN SAUL, Washington, D. C.

BULBS AND TUBERS.

Tuberous Rooted Begonias, Fancy Leaved Caladiums, Crassifolia Gloxinias, Double, Single and Cactus Dahlias.

We offer the following bulbs, largely grown by ourselves, extra fine stocks and first-class in every way. Desirable and salable varieties to be offered in retail circulars and catalogues.

	Per doz.	Per 100
AMARYLLIS Formosissima	$1.00	$7.00
Johnsoni	4.00	30.00
Vittata	2.50	20.00
BEGONIAS, Tuberous Rooted, Finest mixed Singles, per 100 $6.00, per 1000 $50.00.		
" " " " Double	1.50	12.00
" " " " Single, Scarlet, Crimson, Yellow, White, Orange and Pink	1.00	7.00
DAHLIAS Pompone, Show Cactus, and Single varieties in fifty finest named sorts, strong ground roots	1.50	12.00
DIELYTRA SPECTABILIS, strong clumps	1.00	6.00
GLOXINIA CRASSIFOLIA in the finest mixture, extra selected bulbs	1.50	12.00
First size	1.00	10.00
Second size	.75	8.00
CALADIUMS, fancy leaved varieties in thirty distinct named sorts	2.00	15.00
IPOMEA PANDURATA	.50	4.00
TIGRIDIAS Conchiflora	.50	3.00
Grandiflora	.50	3.00
" Alba	.50	3.00

Orders booked now and reserved until weather moderates or shipment requested.

HENRY A. DREER, 714 Chestnut Street, PHILADELPHIA.

TIME

. . FOR DISTRIBUTION OF . .

NEW CHRYSANTHEMUMS Is near at hand.

Send us a list of your wants and let us make you a price before ordering. Also mention any of the older sorts you require.

NATHAN SMITH & SON,
167 W. Maumee St., ADRIAN, MICH.

100,000 VERBENAS.

THE CHOICEST VARIETIES IN CULTIVATION.

Fine pot plants, $2.50 per 100; $20 00 per 1000 Rooted Cuttings, $1 00 per 100; $8 00 per 1000.

NO RUST OR MILDEW.

Packed light, and satisfaction guaranteed. Send for circular. . . .

Our sales reached nearly 250,000 last year, and we can assure our customers that our plants are fully equal, and assortment of varieties surpass those of last year.

J. L. DILLON, Bloomsburg, Pa.

SHADE TREES.

For Streets, Parks and Lawns.

50,000 Carolina Poplars, 10,000 Lombardy & VanGerts, 30,000 Silver Maples, 10,000 Ash Leaf Maples, 10,000 Sugars and Norways Elms, Lindens, Plants, &c. Fruit and Nut Trees, Small Fruits. Catalogue Free.

WM. PARRY, - PARRY, N. J.

$50 IN GOLD.

That is the sum we will pay to the Gardener, Foreman or other party sending us the best plans for a range of ten new houses. Send for particulars,

JOHN A. SALZER SEED CO., LA CROSSE, WIS.

Rooted Cuttings

of Evergreens, Hardy Flowering Shrubs and Hardy Perennials (Achillea, iberis, etc.) raised on contract for spring delivery. SEND LIST OF WANTS.

. . . ISAAC C. ROGERS, MOORESTOWN, N. J.

COLEUS AND GERANIUMS

Cuttings and potted plants.
Wholesale and Retail. . . . .

CHAS. A. BAIRD, Manalapan, Mon. Co., N. J.

Always mention the American Florist when writing to advertisers.

ONE MILLION

Trees, Shrubs, Decorative Herbaceous Plants, etc. for landscape gardeners, parks, cemeteries and private gardens.

Catalogues free. Prices low. . . .

B. M. WATSON,
Old Colony Nurseries, PLYMOUTH, MASS.

Always mention the AMERCAN FLORIST when writing to advertisers.

TUBEROUS ROOTED BEGONIAS.

Best selling stock for Retail Florists. Order now and start into growth for early sales. Sell like hot cakes when in bloom. Try them if you never have. If you have, then you know it. In large quantities; choicest quality.

SINGLE, in 5 separate colors, white, yellow, scarlet, pink and crimson.....$6.00 per 100; $50.00 per 1000.
DOUBLE, in 5 separate colors.....$16.00 per 100. (Can be mailed for 30 cts. per 100.)

F. R. PIERSON COMPANY, TARRYTOWN ON THE HUDSON, NEW YORK.

CHRYSANTHEMUMS

We Offer for a Short Time the Following Standard Sorts. The Plants are in the Pink of Condition.

					Per 100
W. H. Lincoln,	stock plants,		4-in pots..		$15.00
H. E. Widener,	"	"	"	" ..	25.00
Ivory,	"	"	"	" ..	25.00
Domination,	"	"	"	" ..	15.00
Mrs. Geo. Bullock,	"	"	"	" ..	15.00
L. Canning,	"	"	"	" ..	15.00
W. H. Lincoln,	"	"	2-in.	" ..	3.00
H. E. Widener,	"	"	"	" ..	5.00
Ivory,	"	"	"	" ..	4.00
Domination,	"	"	"	" ..	3.00
Mrs. Geo. Bullock,	"	"	"	" ..	3.00
L. Canning,	"	"	"	" ..	3 00
Potter Palmer,	"	"	"	" ..	5.00
Ruth Cleveland,	"	"	"	" ..	5.00
Mrs. E. D. Adams,	"	"	"	" ..	6.00
Minnie Wanamaker	"	"	"	" ..	5.00
Mrs. Irving Clark,	"	"	"	" ..	3.00
Louis Boehmer,	"	"	"	" ..	3.00
Mrs. B. Harrison,	"	"	"	" ..	3.00
Kioto,	"	"	"	" ..	3.00

Rooted Cuttings ready Feb'y 25th of the following Varieties:

Mrs. Geo. Bullock, L. Canning, Kioto, Domination, Mrs. B Harrison, Louis Boehmer, at.....$1.50 per 100
H. E. Widener, Ivory.....$2.50 per 100

25 at 100 rate. Packing free.

JOHN IRVINE CO.,

Bay City, Mich.

P. S. Adiantum Capillus Veneris, 2-inch, a fine lot now ready for shipment at $5 per 100. Nephrolepis Exaltata, 3-inch, $7 per 100.

PLANTS. FLOWERS.

Mendenhall, the Pioneer Florist of the Northwest, always to the front with the finest, healthiest, cleanest stock of Roses, Carnations, Smilax and all kinds of Bedding plants to be found. Prices low. Send for catalogue. Cut flowers at wholesale and retail. The pure air of Minnesota is good for man, beast and plants, and Minneapolis is the place, and Mendenhall Greenhouses is the name to address for anything good in the florist line.

MENDENHALL GREENHOUSES,
MINNEAPOLIS, MINN.

FICUS ELASTICA.

$5.00, $6.00 and $9.00 per dozen.

JOHN BURTON,
Chestnut Hill, Philadelphia, Pa.

ROOTED CARNATION

GOLDEN GATE, very fine, $2 per 100.

SMILAX PLANTS,

in 3-inch pots, good bushy plants, $3 per 100.

GEO. A. KUHL, Pekin, Ill.

F. & O. T. S. R. V. P. B. S.

Stand for Fruit and Ornamental Trees, Shrubs, Roses, Vines, Plants, Bulbs, Seeds. One of the very largest and best assortments in the U. S.

SPECIAL SURPLUS

In Fruits, Apple, Standard and Dwarf Pear, Plum, Peach, Grape Vines, Small Fruits, etc.
In Ornamentals for Lawn, Street and Park Planting, Ash, Alder, Balm of Gilead, Birch, Beech, Catalpas, Elms, Maples, Magnolias, Oaks, Poplars, Salisburias, Tulip Trees, Willows, etc.
In Evergreens, Arbor Vitæ, Box, Cupressus, Firs, Junipers, Pines, Rhododendons, Retinisporas, Spruces, etc.
In Shrubs, Altheas, Berberry, Cornus, Corcorus, Calycanthus, Deutzias, Forsythea, Fringe, Hydrangea, Honeysuckle, Lilac, Privet, Spireas, Syrinea. Weigelia, etc.
In Climbing Vines, Ampelopsis, Bignonia, Clematis, Honeysuckle, Ivy, Wistaria, etc.
In Roses and Plants, In extensive assortment; of the former we grow three-fourths of a million, of the latter millions, a year. For more complete assortment send for Trade List, free to Nurserymen, Florists and Dealers.

39 YEARS. 28 GREENHOUSES. 900 ACRES.

THE STORRS & HARRISON CO., Painesville, Lake Co., Ohio.

CYCAS REVOLUTA.

The largest and BEST selected stock of Cycas Revoluta (fronds and roots cut off, TRUE, long leaved variety) now on hand. CYCAS CIRCINALIS delivered from April 1st.

Lilium Auratum, Lilium Spec. Album, Lilium Spec. Rubrum, Nerine Japonica, Lilium Krameri, etc., in great quantities, imported for spring trade.

Price on application.

F. GONZALEZ & CO.,

303-312 WAYNE STREET, CRESCENT AVE.,
SAN FRANCISCO, CAL.

N. B. Fresh Cycas leaves for sale by the thousand.

THE CATALOGUE OF NEW PLANTS ETC.,
—OF—
V. LEMOINE & SON, NANCY, FRANCE,

Can be had on application from their sole agent,

C. RAOUX, 296 PEARL STREET, NEW YORK.

The Snow Crest Daisy fills the bill;
Test it any way you will;
However you must grow it cold;
Then its mammoth size will hold.

Every florist should invest
In this Daisy; 'tis the best;
For design work so complete
There's really nothing quite so neat.

CUT BLOOMS, $1 PER 100, POST FREE.

Large stock fine plants all in bud and blooming, 15 for $1.00; 100 for $5.00; sample plant and bloom for 12c. Double fringed petunias, Dreer's, mixed, all colors, stock plants, 3-inch, strong, 60c. per doz.; $4 per 100; smaller from flats, $2.50 per 100; rooted cuttings, $1.10, post free. The florist double white forcing Petunia, white as the driven snow, fringed and delicately scented, valuable for cutting, design work, etc., stock plants, $1 per doz.; from flats, $8 a 100; rooted cuttings, $1.50 per 100. Double Golden Marguerites, the genuine dwarf, large flowered, stock plants, 60c. per doz., $4 per 100; smaller from flats, $2 per 100; rooted cuttings, $1.10, post free. Double Dahlia Sunflower (Helianthus multiflorus), rooted pips ready for potting, 50c. per doz., $2.50 per 100. French Cannas, Fairmount Park strain, reds in variety, dry roots ready for potting, 60c. per doz., $3 per 100; large flowered yellow, mixed, plain blotched, striped; these are extra fine showy kinds 60c. per doz. $4 per 100; a few extra fine bronze-leaved kinds, 60c. per doz. Variegated Vincas, field-grown, 3-inch, $8 per 100; small from flats, $2 per 100. Coleus, Fuchsia, Stevia, Alyssum, double and single, Gem, Feverfew and miscellaneous rooted cuttings, $1 per 100, small pits, $2 per 100. Rooted cuttings per 100 and small plants per doz. post free if desired. Safe arrival and satisfaction guaranteed or money refunded.

Address **J. C. GIBSON, Woodbury, N. J.**

Association "Flora"

BOSKOOP, HOLLAND.

Now on hand in New York:
CLEMATIS, 3 Years, per 100, $30.00
H. P. ROSES, for forcing, " 9.00

In the best variety, as Alfred Colomb, Anna de Diesbach, B. Rothschild, Fisher Holmes, Gen. Jack, La France, Mme. G. Luizet, Mme. Plantier, Magna Charta, Paul Neyron, F. C. de Rohan, Merville de Lyon, Perle des Blanches, Ulrich Brunner and other sorts. Azaleas, Rhododendrons, Spiræas, etc. We also have Palms, Dracænas, Araucarias and Bay Trees at our nurseries in Holland. Catalogue on application.

P. OUWERKERK, 206 Cambridge Ave.,
JERSEY CITY, N. J.

TRY DREER'S GARDEN SEEDS

Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly, mailed free to the trade only.

HENRY A. DREER,
Philadelphia

Toronto.

The snow it snoweth every day, and the lot of the gardener who has much sidewalk to keep clean is not an easy one; however, the sun when it deigns to show itself now helps him a little with its warmth, but in the memory of the original "oldest inhabitant" it never showed itself so seldom.

Bulbous stuff is showing up in large quantities now and the quality is very good.

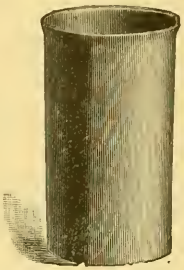
Mr. Wm. Chappell, late gardener to Goldwin Smith, Esq., who had been sick for some time died last week. Mr. Wm. Vair, of Owen Sound, brother to Mr. Geo. Vair, also died last week. Resolutions of condolence were passed at the regular meeting of the G. and F. Association.

There is rejoicing in the house of Manton over a son and heir born to Mr. George Manton. Congratulations were also in order at the afore mentioned meeting.

The chrysanthemum show prize list for November 7, 8, 9 and 10, 1893, took up most of the time at the last meeting of the Association, and it may be safely said that it is an improvement on last year's list, though the prizes had to be reduced in order to keep within the limit decided on. There will be many more prizes donated by private citizens this year though, about 17 or 18 articles, such as cups, medals, etc., having been promised. Every member knows that the Association could not afford to offer prizes that would *pay* the exhibitors back in so much cash for the trouble and expense they go to with their various exhibits until they are staged, but I think that those who do not recognize the great good done by these shows in booming horticulture generally are a very small minority. There can be no better way of advertising than by ocular demonstration. The minority report of the St. Louis Florists' Club chrysanthemum committee strikes one as a very one-sided, selfish and short-sighted way of looking at things, and not in accordance with the spirit of the times in which we live. E.

CUT FLOWER VASES

Great Reduction in Prices.



On and after this date (Feb. 2, '93) the following schedule of prices are in force:

No.		Each.	Dozen.
0—8	in. diam. by 13 in. deep,	.40	$4.00
1—5½	in. diam. by 10 in. deep,	.35	3.50
2—4½	in. diam. by 9 in. deep,	.30	3.00
3—4	in. diam. by 6 in. deep,	.25	2.50
4—3	in. diam. by 4½in. deep,	.20	2 00

The above quotations cancel the prices in our trade list at page 45. Kindly make note of same on the catalogue sent you, as we will not issue a new list for some little time. These vases have the appearance of polished mahogany; they are neat, attractive and durable, and at the low figure now prevailing **Exceedingly Cheap.** They will consequently be more popular than ever. Please note that we offer them **AT FACTORY PRICES.** . . . . .

JOHN GARDINER & CO., Seedsmen, PHILADELPHIA.

NEPONSET ◆ FLOWER ◆ POTS

of Waterproof Paper, light, durable, unbreakable and cheap.

Tomato Growers have used them with success and proved their appreciation by repeated orders.

Cabbage Growers have tried them and duplicated their orders.

Market Growers of Verbenas, Alyssum, Coleus and other plants, which do not shun moisture, have used them extensively in repeated seasons.

Recommended for light and safe packing of tender and valuable plants, for the marketing of Ferns, Dutch Bulbs, Lily of the valley and the like.

Cost about 40 per cent less than earthen pots, and weight considerably lighter, thus saving in first cost and freight.

For Price List and further particulars address

Wholesale Agents:

AUGUST ROLKER & SONS, Station E, New York.
R. & J. FARQUHAR, - - - - Boston, Mass.

Who furnish samples, by mail, postpaid, on receipt of

	10 cts.	11 cts.	14 cts.	17 cts.	22 cts.	40 cts.	60 cts.
For 1 dozen	2¼-in.	2½-in.	3-in.	3½-in.	4-in.	5-in.	6-inch pots.

F. W. BIRD & SONS, Sole Manufacturers, EAST WALPOLE, MASS.

C. C. Abel & Company

P. O. Box 920, **NEW YORK,**

FLORIST'S, NURSERYMEN'S AND SEEDSMEN'S AGENTS,

—For the following—

WELL KNOWN AND RELIABLE HOUSES,

For whom we solicit your orders:

C. G. VAN TUBERGEN, Jr., Florist and Seedsman, Haarlem, Holland. Choice Dutch Bulbs, Novelties, etc.

PIERRE SEBIRE & SONS, Nurserymen, Ussy, France. Roses, Evergreens, Fruit and Forest stocks.

ERNST RIEMSCHNEIDER, Florist and Seedsman, Altona, Germany. Berlin Lily of the Valley a specialty.

EDM. VAN COPPENOLLE, Nurseryman, Ghent, Belgium. Established 1850. Large culture of Araucarias, Azaleas, Indica and Mollis, Bay Trees, Begonias, Gloxinias, Palms, Rhododendrons, etc., etc.

ALPHONSE ROCHE, Ollioules, France. Extensive and special plantation of Immortelles and dyed to all colors and shades.

ERNEST RIEMSCHNEIDER, Florist and Seedsman, Altona, Germany. Choice selections of German Flower Seeds. Also of Palms, Grass and Garden Seeds. Best Sugar Beet Seeds a Specialty.

Catalogues (mention which) free on application when received for distribution.

All orders for these houses should be plainly written and addressed to us.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

FOR SUMMER PLANTING.

Try them for Bedding Out this coming season.

CRINUMS—Augustum, magnificently attractive; size of bulbs is more or less than 12 in. long, 18 in. in cir. at base, 12 in. at neck. They are now of an age to produce from 1 to 3 flower stalks in a season. The elegant, imposing form of the plant, alone, is worthy of admiration. Price, $2.00 each.

KIRKII, 35c. each, $3 50 per doz., $25 per 100. Smaller size $15 per 100.

Fimbriatum, $8 per 100, $55 per 1000.

Americanum, $2.50 and $5 per 100, $20 to $40 per 1000.

All of the above are objects of great beauty in the garden. Our experience has proven they are valuable for cutting. Try them.

PANCRATIUM Carribeanum, large, old bulbs which will produce an abundance of snowy blooms. $6.00 per 100.

AMARYLLIS Longifolia rosea, 6 in. long, 14 in. at base, 8-in. at neck, 75 cts. each.

Zeph. Treaten, $5 per 1000; large lots $4 per 1000.

ANTIGONON Leptopus, nice roots of this beautiful vine, $5 per 100.

CYPERUS Alternifolius, strong roots, 75 cts. per dozen, $5 per 100.

ROSE—Greville or Seven Sisters, 1 year, strong, $6 per 100.

SEED—Zamia Integrifolia, FRESH, native, 65 cts. per lb. by mail postpaid.

☞ Write for Price List.

THE BROOKS SISTERS,
Florists & Bulb Growers, Sorrento, Fla.

Mention American Florist.

L. T. Seaver,

THE PANSY KING of America, sells a wire staple d. White stock Verbena Basket, 5x10 inch on bottom, 3-inch high, with a single wire bale, which can be easily adjusted and secure by only hooking on in a new way, $12 1,000, such as he uses 50,000 each year for Pansies. Wooden bales if ordered. **Seaver's Famous Pansy Seed, $2.00** per oz. No. Somerville, Mass.

CUTS!

Wood Engraving,
Zinc Etching,
Half-Tone,
Wax Engraving, Photo-Engraving,
Designing.

MANZ & CO.,

183 Monroe Street, CHICAGO. **ENGRAVERS.**

No Trees of 1st quality can ever be sent by mail. Mayhap you know it. By freight, prepaid if preferred, we ship safely 4, 5, or 6 ft. trees; 2-yr. Roses of rare excellence—everything! You actually pay less than for the puny stuff. 1,000 acres Nurseries. 20,000 acres Orchards. Exact information about trees and fruits. Stark Bros., Louisiana, Mo.

Mention the American Florist when writing to advertisers on this page.

LITTLE'S ANTIPEST.

— A —

Valuable Discovery of the 19th Century.

SILVER MEDAL AWARDED

— BY THE —

CALIFORNIA STATE FAIR OF 1890.

This preparation is a sure destroyer of the **Scale, Wooly Aphis** and **Insect Pests** of any and all descriptions. It may be as freely used in the conservatory, garden and greenhouse as in the orchard or vineyard. It is non-poisonous and harmless to vegetation when diluted and used according to directions. It mixes instantly with cold water in any proportion. It is **Safe, Sure** and **Cheap.** No fruit grower or florist should be without it.

Send for Circulars and Price List.

R. W. CARMAN, General Agent,
291 AMITY STREET,
FLUSHING, Queens, Co., N. Y.

W. C. KRICK'S
PATENT
Florists' Letters, Etc.
Highest Award wherever exhibited.

These Letters are made of the best immortelles, wired on wood or metal frames having holes drilled in them to insert toothpicks, by which to fasten them in the design. All infringements prosecuted.

24-inch Letters, $3 00 per 100. Postage, 15c. per 100.

Before purchasing send for free sample and Catalogue and compare with any other letter in the market.

W. C. KRICK, 1287 Broadway, BROOKLYN, N. Y.

Agents:—J. C. VAUGHAN, Chicago, Ill.; H. BAY ERSDORFER & CO., Phila., Pa.; N. STEFFENS, N. Y.; AUG. ROLKER & SONS, N. Y.; ED. S. SCHMID, Washington, D. C.; JAMES VICK'S SONS, Rochester N. Y.; T. W. WOOD & SONS, Richmond, Va.; J. A. SIMMERS, Toronto, Ont.

BOSTON FLORIST LETTER CO.,
13 Green Street, BOSTON, MASS.
Address all correspondence to 1 Music Hall Place.

Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1½-inch and 2-inch, $2.00 per 100. Patent fastener with each letter.

With orders for 500 letters we give away a nicely stained and varnished box. See cut in next week's American Florist.

Our letter is handled by all the wholesalers in Boston.

AGENTS: Marschuetz & Co., 25 N. 4th St., Philadelphia, Pa.; A. Rolker & Sons, New York; F. E. McAllister, 22 Dey St., N. Y.; E. Kaufman, Philadelphia; H. Bayersdorfer & Co., Philadelphia, Pa.; A. D. Perry & Co., 33 Warren St., Syracuse, N. Y.; A. C. Kendal, 115 Ontario St., Cleveland, O.; E. H. Hunt, 79 Lake St., Chicago; Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.; H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O.; T. W. Wood & Sons, 6th and Marshall Sts., Richmond, Va.; Jas. Vick's Sons, Rochester, N. Y.; Dan'l B. Long, Buffalo, N. Y.; C. A. Knehn, St. Louis.
J. A. Simmers, Toronto, Ont., Agt. for Canada.

The Sower

Has no second chance. The first supplies his needs — if he takes the wise precaution of planting

Ferry's Seeds

Ferry's Seed Annual, for 1893, contains all the latest and best information about Gardens and Gardening. It is a recognized authority. Every planter should hav eit. Sent free on request.
D. M. FERRY & CO., Detroit, Mich.

Mention American Florist.

STOTT'S SYSTEM OF SPRAYING SAVES PLANTS-FLOWERS-FRUITS.

KILLMRIGHT KILLS, INSECTS AND MILDEW

STOTT'S DISTRIBUTER CHARGED WITH KILLMRIGHT, CONNECTED WITH FAUCET READY FOR USE WORKS EQUALLY WELL WITH A GARDEN ENGINE.

TOTT'S PRAYER

STOTT'S SYRINGE

CELL "A" CONTAINS THE KILLMRIGHT

SEND FOR CIRCULAR AND TESTIMONIALS.

STOTT GARDEN IMPLEMENT COMPANY
136 LIBERTY ST. NEW YORK.

Are You a FRUIT or FLOWER RAISER?

FOR MARKET OR PLEASURE.

If so, you need reliable **FUNGICIDES and INSECTICIDES.** We are the largest manufacturers of these articles in the world. Our products are highly recommended by leading Agricultural Chemists, Gardeners, Horticulturists and Florists everywhere.

Powell's Guicide Powder.

25-Pound Boxes, 6 cents per pound; $1.50 per box.

For Potato Blight, Potato Rot, Grape Vine Flea Beetle, Potato Bugs, Pear and Cherry Slugs, Codling Moths, Curculio, and Strawberry Crown Borers. Can be used either dry or in solution, 2 lbs. to 50 gallons of water.

Powell's Copperline.

1-Gallon Cans (makes 100 Gals. Wash) $1.50 per can.

For Black Rot, Downy Mildew and Anthracnose of the Grape, Pear Leaf Blight, Pear Scab, Apple Scab and Powdery Mildew.

Powell's Bordeaux Mixture.

20-Pound Packages 50 Gals. Wash), $1.00 per pkg.

For Black Rot, Downy Mildew and Anthracnose of Grapes, Potato Blight, Potato Rot, Leaf Blight of Cherry, Pear, Quince and other Fungus diseases.

Powell's Sulpho-Stratite Powder.

25-Pound Boxes (used as a dust), 8 cents per pound.

For Lettuce Mildew, Powdery and Downy Mildew of the Grape, Rose Mildew and other Fungus diseases affecting plants under glass.

Powell's Kerosene Emulsion.

5-Gallon Buckets (makes 75 Gallons Wash), $1.25 per bucket.

For Plant Lice of any kind, Horn Flies, Cabbage Worms, Scale Insects on Apple, Pear, Orange, Lemon and other trees.

Powell's Quassaine.

1-Gallon Cans (100 Gallons Wash), $1.50 per can.

This is a Concentrated Fluid Extract Quassia, held in suspension by Whale Oil Soap—adopted and officially recommended by the State Horticultural Board of Washington, as a cheap and reliable non-poisonous Insecticide for Hop Lice, Aphis and all Scale Insects—nothing better for Rose Bushes and House Plants.

Powell's Carbolized Soap.

1-Gallon Cans (makes 12 Gals. Paint), $1.00 per can.

For Peach, Apple and other Tree Borers; also for washing trees to prevent attacks of Animals or Vermin.

SEND FOR SPECIAL CIRCULAR. Agents in Every State. Bone Meal, Bone Black, Nitrate Soda, Tobacco Stems, Whale Oil Soap, Sulphate Copper, Hellebore, Insect Powder, Ammonia, Precip. Carbonate Copper. **Special Fertilizers for Fruits, Vegetables and Flowers. Fertilizer Depots, Baltimore, Boston, Chicago, Cincinnati and St. Louis.**

SPECIAL AGENTS.

Joseph Breck & Sons, Boston; Peter Henderson & Co., N. Y.; Johnson & Stokes, Philada.; Field Force Pump Co., Lockport, N. Y.; A. W. Livingston Sons, Columbus, O.; The Henry Phillips Seed Co., Toledo, O.; S. F. Leonard, Chicago; Jos. F. Dickman, St. Louis, Mo.; Currie Bros., Milwaukee; Kentucky Seed Warehouse, Louisville; T. W. Wood & Sons, Richmond, Va.; Holland & Co., Pleasant Lake, Ind.; Colorado Nursery Co., Loveland, Colorado.

W. S. POWELL & CO., Baltimore, Md.
Chemical Fertilizer Manufacturers.

TREES FRUIT AND ORNAMENTAL,

SHRUBS, EVERGREENS, ROSES, HARDY PLANTS, FOR SPRING PLANTING.
Immense Stock. Order now. 160 Page Catalogue Free.

ELLWANGER & BARRY, Mt. Hope Nurseries, ROCHESTER, N. Y.

CATALOGUE PRINTING. ELECTROTYPING.

Done with expert ability for Florists, Nurserymen, Seedsmen. Write to

J. Horace McFarland Co.,
HARRISBURG, PA.

— MORE THAN — **1,000,000 TREES**

Fruit and Ornamental. SHRUBS, VINES, ROSES, etc., in over **1,000 Varieties.**
New and Rare. Old & Reliable. | Send for our Illus. Catalogues.

W. S. LITTLE & CO., ROCHESTER, N. Y. or 15 E. 11th St. N. Y. City

When writing to any of the advertisers on this page please mention the American Florist.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

Baltimore.

Flowers are becoming daily more plentiful, and the market stalls as well as the store windows are being made brighter with pot hyacinths and tulips, while violets are actually seeking buyers. The only thing that seems in short supply is smilax, which is occasionally very hard to get, and La France buds, of which, every once in awhile, the town gets bare, much to the vexation of the man who has rather overrun his stock with accepted orders, supposing he could get a few to help out from some fellow tradesman.

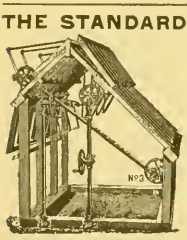
There has been a goodly number of weddings in spite of its being Lent, and that, with funeral work, flowers for sick friends, and plants, keeps the pot boiling, till the longed for Easter trade. If the weather keeps as cold and cloudy as it is, there will have to be some tall firing done during the next few weeks or Easter bloom will be more plentiful after April than before it.

It is Geo. Wm. Klein & Son now.

Annapolis is preparing to take Baltimore by storm, from all accounts and indications. MACK.

A RECENT PUBLICATION sent out by W. Atlee Burpee & Co. is "Manures; How to Make and How to Use Them," by Frank W. Sempers, director of the Fordhook Chemical Labratory. It is a well gotten-up volume of 218 pages, neatly bound in stiff paper. It contains full information concerning natural and chemical manures and their effect on growing crops, analyses, etc., and will be a useful handbook for market-gardeners or farmers.

THE STANDARD Ventilating Machines



Received best awards at BUFFALO, N. Y., BOSTON, MASS., TORONTO, ONT.

Send for Catalogue and prices.

E. HIPPARD, Youngstown, O.

W & C. CO. LIMITED

Wrought Iron Pipe, Fittings, Valves, ETC.

78 JOHN ST., NEW YORK.

WELLS & COUTAN CO., L'td.

Mention American Florist.

GREEN SILKALINE.

FOR STRINGING SMILAX & ASPARAGUS.

Warranted not to Fade.

ALSO ALL KINDS OF BOUQUET THREAD.

JOHN C. MEYER & CO.,

289 Devonshire St., BOSTON, MASS.

When writing mention American Florist.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.

JOHN G. ESLER, Sec'y F. H. A., Saddle River, N. J.

Always mention the American Florist when writing to advertisers.

"Standard" Flower Pots.

As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address

The Whilldin Pottery Company,

BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.

Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.

Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.

A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.

We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.

SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY,

Manufacturing the

ELVERSON, SHERWOOD & BARKER

STANDARD FLOWER POTS.

Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bud Pots, etc.

ADDRESS PITTSBURGH CLAY MF'G CO., New Brighton, Pa.

H. M. HOOKER COMPANY,

57 and 59 W. Randolph Street, CHICAGO,

NATURAL GAS MADE GLASS

FOR GREENHOUSES.

Write for latest prices.

THE BEST POTS.
THE CHEAPEST.
THE LOWEST FREIGHT RATES.
THE BEST OF PACKING.
THE LARGEST POTTERY IN THE STATE FOR MAKING STANDARD FLOWER POTS.

PRICE LIST OF POTS.

	Per 100		Per 100
2 inch	$ 3.25	6 inch	$ 2.20
2¼ "	3.50	7 "	3.50
2½ "	4.00	8 "	5.00
3 "	5.00	9 "	7.50
3½ "	7.25	10 "	10.00
4 "	9.00	11 "	15.00
5 "	13.80	12 "	20.00

Terms: Cash, free on board cars here. Address

HILFINGER BROS., Potters

FORT EDWARD, N. Y.

U. S. AND FOREIGN PATENTS Trade Marks, Designs, Opinions, Searches, &c., promptly attended to. Send sketch or model for free examination as to patentability. All work strictly confidential.

GEO. H. CHANDLEE,

Atlantic Building, WASHINGTON D.

Mention American Florist

PLANT BED CLOTH.

CHEAP SUBSTITUTE FOR GLASS on Hot-beds, Cold Frames, etc. Three grades.

Light, Medium, Heavy.

Used by Florists, Gardeners, etc., Invaluable for Tobacco Growers. Protects from frost. Promotes, hardy, vigorous growth and keeps beds warm; will not shrink or mildew. For sale by the leading Dry Goods houses, Seedsmen, Florists, etc. Well known and extensively used. For circulars and samples apply

NATIONAL WATERPROOF FIBRE CO.,

50 South Street, - - NEW YORK.

Agents Wanted.

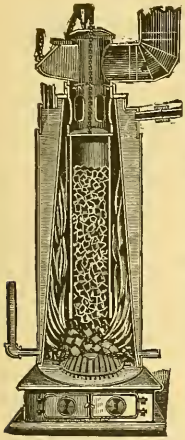
Mention American Florist.

BEED & KELLER

MANUFACTURERS OF FLORISTS' WIRE DESIGNS

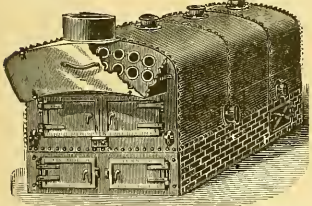
122 W. 25th St. NEW YORK

Mention American Florist.



THE WILKS HEATER,
FOR HEATING
GREENHOUSES, STORES, DWELLINGS, ETC.
Manufactured by THE S. WILKS MF'G CO. 123 S. Clinton St., CHICAGO, ILL.
SEND FOR CATALOGUE.

KROESCHELL BROS.
IMPROVED
Greenhouse × Boiler,
41 to 55 Erie St., CHICAGO.



Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around (front, sides and back). Write for information.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

Clear Cypress, from bottom gutter up is my specialty.

Lyman Felheim,
ERIE, PA.

Mention American Florist.

YOU CAN SAVE MONEY BY PURCHASING, AND GLASS BY USING
Hamilton's Patent Sash Lifter.

The best thing of the kind ever invented, for either high or low greenhouses. Send for description and price list.

BAY STATE HARDWARE CO.,
272 Freeport St., BOSTON, MASS.

See what This man Says about it.

EVERY BODY TELLS ME,

AND NOW I TELL YOU

THE "NEW DEPARTURE"

Is the BEST and the Cheapest

Ventilating Appliance

That has ever been Introduced for FLORISTS' USE.

MACOMB, ILL., Feb. 21, 1893.
MR. J. D. CARMODY, *Dear Sir:*
The ventilating apparatus received of you we finished putting up yesterday, and it works fine—I don't know how any one could ask more—as it raises the windows in a 100-foot house easily and evenly. If I had known a ventilating apparatus could be bought for so little money I would have ordered one for the house I built last year; and if I build another next year you can count on an order.
Very respectfully, I. L. PILLSBURY.

J. D. CARMODY, - - Evansville, Indiana.

C. HENNECKE CO.

Milwaukee, Wis.

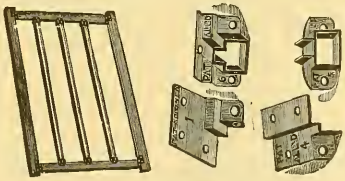
Price list of our Standard Greenhouse Pots:

1 3-4 inch,	per 1,000,	$3.00	3 1-2 inch,	per 1,000	$6 75
2 inch,	"	3.50	4 inch,	"	8.00
2 1-2 inch,	"	4.00	5 "	"	13.50
3 inch,	"	5.50	6 "	"	22 50

The superiority of our pots is acknowledged by all who have used them.

WRITE FOR OUR CATALOGUE OF

Fancy Pots, Vases, Jardinieres, Wire Designs,
ETC., ETC.



GARDENERS HOT-BED SASH.
INDESTRUCTIBLE.
CYPRESS GREENHOUSE WOOD WORK OF ALL KINDS.
Write for prices.
THE PEIRCE & COLEMAN CO.,
Dayton, Ohio.

J. C. VAUGHAN, Agent for Chicago and New York.

Mention American Florist.

J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS •
Greenhouse Material,

LOUISVILLE, KY.

Mention American Florist.

Index to Advertisers.

Abel C C & Co.....776
Adv Rates, etc.....766
Anchorage Rose Co ..764
Asmus Ernst.....765
Baird Chas A.....774
Baller F A 769
Barnard W W & Co....762
Bay State Hdw Co.....779
Bayersdorfer H & Co..766
Baylis Henry W.....767
Berger H H & Co.....769
Birl F W & Son 776
Beck Wm A 772
Bonsall Jos E & Son...767
Boston Letter Co. .. . 777
Boulon F 769
Brackenridge & Co.....770
Brague L B. 766
Brauer & Richter . 770
Brooks Sisters.....776
Bunting S J.....772
Burns & Raynor.....767
Burrow J G.....769
Burton John..... 765 775
Carman R W.....777
Carmody J D.....779
Chandler Geo F.....778
Chicago Cut Flower Ex 766
Chitty H E.....772
Clark B L 766
Cliffe David.....764
Connelly John J 765
Corbrey T J & Co.....767
De Cock Jules 770
De Lamater Iron Wks.780
Dillon J L.....774
Dreer H A.....774 775
Elgin Rose Co 770
Elliott J Wilkinson.....774
Elliott W H.....766
Ellison Wm.....766
Ellwanger & Barry.....777
Evans Charles F & Bro 764
Faust H G & Co.....770
Felheim Lyman.....779
Ferry D M & Co 777
Field S B.....772
Gardiner J & Co......776
Gibson J C.....775
Gonzalez & Co.....775
Gregory J J H & Son...765
Hall Ass'n.....778
Hancock Geo 773
Hansen Christ 773
Hart James.....767
Hart Michael A 767
Hartford H E.....766
Heinl Jos.....769
Henderson John Co ..765
Hennecke C Co 779
Herr Albert M.....773
Hews A H & Co.....778
Hilfinger Bros.....778
Hill E G & Co.....770
Hippard E 764 778
Hitchings & Co.....780
Hooker H M Co.....778
Horan Edw C.....767
Horan James.....762
Horsford F H.....772
Hulsebosch Bros.....769
Hunt E H.....767
Hunt M A.....764
Hunter & Purdy.....767
Irvine John Co.....775
Jennings E B.....772
Joosten C H.....769
Kaufmann Ernst & Co.766
Kennicott Bros.....767
Koffman E.....766
Krick W C.....777
Kroeschell Bros.....779
Kuehn C A.....766
Kuhl Geo A.....775
Larkin Isaac.....775
La Roche & Stahl..765 767
Lee W A.....772
Little W S & Co.....772
Lockland Lumber Co...780
Lombard R T..... 773
Long Dan'l B.....766
McBride Alex.....773
McCarthy N F & Co....767
McFarland J H 780
McFarland J H Co.....777
McGowan John.....773
Manz J & Co.....776
Marschuetz & Co.....766
May John N 770
May D L & Co 768 769
Meech F J & Son 770
Mendenhall R J.....775
Meyer John C & Co 778
Michel Plant & Bulb Co 770
Millang Bros..... 767
Moffatt G J.....769
Moninger Jno C.....780
Moore Frank L.....765
Mullen Geo. 766
Nagel E A Co.....773
Nanz C G 769
Nanz & Nenner.....764
National Fibre Co ... 778
Nielson Hans 772
Niles Centre Floral Co.767
Olson M 767
Ouwerkerk P.....775
Parry Wm 774
Peck & Sutherland.....767
Peirce & Coleman Co..779
Pennock C J.....772
Pennock F M 773
Pennock Sam'l S. 767
Pierson F R Co.....771 775
Pittsburg Clay Mfg Co.778
Powell W S & Co.....777
Randall A L.....767
Raoux C.....775
Reed & Keller.....778
Renard Joseph.....773
Rimbaud Benj..... . 769
Roberts D H.....780
Roehrs Theo.....767
Rogers Nurseries.....774
Rolker A & Sons.....766
Russell S J.....766
Salter Bros.....764
Salzer John A.....769 776
Sander & Co.....770
Saul John.....774
Schnelder C F.....765
Schulz Jacob.....764
Scollay John A.....780
Seaver L T 776
Semple James 772
Shelmire W R.....773
Sheridan W F.....767
Siebrecht & Wadley....770
Siptle Dopfiel & Co....778
Situations, wants. . . 768
Smith C A Florsl Co...766
Smith Henry 769
Smith Nathan & Son...774
Spaulding T H. 770
Stahl Wm.....779
Stark Bros 765 776
Storrs & Harrison Co 768 775
Stott Garden Imp Co ..775
Strauss C A Co. 764
Struck J N & Bro 779
Styer J J..... 773
Sunderbruch H L.....766
Swayne Edw 772
Swayne Wm.....773
Trieker Wm.....762
Tritschler M.....768
Vaughan J C 770
Vreeland A J.....772
Washburn Andrew.....773
Watson B M.....774
Weeber & Don.....762
Welch Bros.... 767
Wells & Coutan Co.....778
Whitlidin Pot Co.....778
Wight W P.....780
Wilks S Mfg Co.....779
Wisconsin Flower Ex..766
Wood Bros.....772
Woodruff W B 770

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

CYPRESS GREEN HOUSE MATERIAL

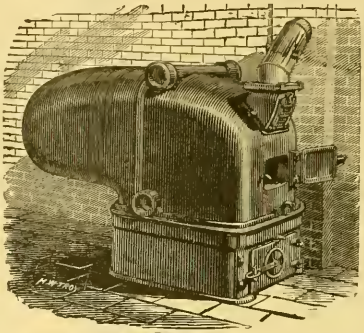
CLEAR CYPRESS SASH BARS

HOT BED AND VENTILATING SASH

JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

GREENHOUSE HEATING AND VENTILATING

Horticultural Architecture and Building.



HITCHINGS & CO.

Established 1844.

233 Mercer St., New York.

FIVE PATTERNS OF BOILERS.

NINTEEN SIZES.

Perfect Sash Raising Apparatus.

Rosehouses, Greenhouses, Etc, of Iron Frame Construction, Erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frame Benches with the "Perfect Drainage Bench Tile" or Slate Top.

SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUE.

Mention American Florist.

THE "LOCKLAND" Sash Bars

ARE ALWAYS SATISFACTORY.

This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.

GUTTER MATERIAL, RIDGES, SASH, ETC.

The finest CLEAR CYPRESS used.

Write for circulars and estimates. . . .

LOCKLAND LUMBER CO.

. . . . . Lockland, O.

Mention American Florist.

RIDER

Do You Want A RELIABLE SUPPLY OF WATER

For Your GREEN HOUSE, ROSE HOUSE, NURSERY,

Conservatory, Lawn, House, Garden, Stock or any other purpose, WITHOUT EXPENSE OF TIME OR LABOR?

All of this can be accomplished by using the improved RIDER OR ERICSSON HOT-AIR PUMPING ENGINE

Catalogue with full partic lars, sent on application.

DE LAMATER IRON WORKS, 21 CORTLANDT ST., NEW YORK, N.Y.

ERICSSON

FIRST-CLASS CERTIFICATE OF MERIT.

PERFECT DRAINAGE **BENCH TILE** • Used by all the leading Growers and Horticultural Builders.

For testimonials, circulars, etc., address W. P. WIGHT,

UPLAND GREENHOUSES, : : : MADISON, NEW JERSEY

GREENHOUSE HEATING AND VENTILATING.

Superior Hot Water Boilers.

JOHN A. SCOLLAY,
74 & 76 Myrtle Ave., Brooklyn, N.Y.
Send for Catalogue.

Mention American Florist.

D. H. ROBERTS,
159 & 161 South 5th Ave., New York.

NATURAL GAS MADE GLASS for Rose Houses, Conservatories, etc., etc. Our glass received the highest award at the Boston Convention of the S. A. F.

Mention American Florist.

FLORAL DESIGNS

The Cut Flower Worker's friend. Fine book of 160 pages. Send $3.50 for it, to HORACE McFARLAND, Harrisburg, Pa.

THE AMERICAN FLORIST

A WEEKLY JOURNAL FOR THE TRADE

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, MARCH 9, 1893.** **No. 249**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company.
Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,

322 Dearborn Street, CHICAGO.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis, Mo., August 9 to 12, 1893.

CONTENTS.

Modern idea for old fashioned garden 781
Roses—The anthracnose of the rose (illus) . . . 784
—The rose problem 784
Miscellaneous seasonable hints 785
Carnations—Seasonable hints 786
—Chester County Carnation Society 786
—Size of carnations 786
Effect of soil 786
Locomotive boiler for heating 786
Alpinia vittata (illus) 787
Things to know about bank checks 787
Philadelphia 788
New York 788
Boston 788
The "White La France" rose 789
St. Louis 790
Chicago 790
Buffalo 790
Baltimore 790
World's Fair notes 792
Catalogues received 794
The seed trade 796
The nurserymen 796
Montreal 798
Ottawa, Canada 800
Toronto 802
Eucharis amazonica 804
Cypripedium Lathamianum 804
Recent legal decisions 806

Indianapolis.

The Indianapolis Florists' Club met in regular monthly meeting March 1 at 113 E. Washington street. This place was selected until the club will be able to have a meeting place of their own. A good attendance was the result, much better than when meeting in a florist's place of business, as was predicted.

Several new members were accepted and several resignations were handed in, but no action taken on them, being laid over until next meeting.

Mr. J. J. B. Hatfield read a paper on diseases of plants, especially carnation diseases, with illustrations. His explanations were very entertaining. Incidentally he remarked that the AMERICAN FLORIST was improving very much and he felt greatly interested in the number of February 23.

Business for February is reported to have been unusually good. All flowers sold well, offsetting completely the dullness of January. The supply of flowers at the present time is more than sufficient.

A Modern Idea for an Old Fashioned Garden.

[*Read before the G. and F. Club of Boston, March 7, 1893, by Prof. B. M. Watson, Jr., of the Bussey Institution.*]

The old fashioned garden may be called one of the popular fads of the day. General ideas upon the subject, however, are rather vague. Hollyhocks, sunflowers and sweet peas naturally suggest themselves, all planted in a somewhat rambling way. There is, too, a fallacious notion that this mode of planting is less expensive than the more formal methods which prevail in extensive public and some private grounds. The old fashioned garden of to-day is certainly not a reproduction of the garden of our great grandmothers; the present generation would never be satisfied with those plants only which were in cultivation at the beginning of the century; many of the introductions of the last 25 years are decided acquisitions to this kind of garden. The significance of the term has as much to do with the shape and arrangement of the beds and borders as with the choice of plants; it implies a simple method of planting in contradistinction from what is known as carpet bedding; it means not only poppies and marigolds instead of coleus and house-leeks, but a natural disposition of the plants; one should look to the woods and fields for suggestions rather than to pattern books of geometric designs.

If the garden is well planned there should be a continuity of bloom from early spring until late autumn. I know a border in which, in 1889, a most favorable season, the first snowdrop opened January 3, and the last fall crocus was in flower November 15, but this is unusual in eastern Massachusetts. The planting must be so arranged that no bare places will show for any length of time; there must be an unbroken sequence of foliage and flower. In market gardening the value of the land and cost of cultivation make it important that one crop should be followed by another in immediate succession; in ornamental work the same economy must be observed. The plants used are generally hardy, although largely herbaceous. Trees, shrubs and annuals should be also employed, and there is no objection to adding coleus and alternanthera, but their effectiveness should not depend upon the number of square feet of ground which they occupy; many of the so-called bedding plants are attractive and should be planted in limited quantities. If possible, fruit trees are to be avoided, especially if planted in rows; the cherry, plum or apple covered with blossoms are beautiful, but let them be just without rather than within the limits of the garden. Eschew vegetables, although herbs like sage, thyme, sweet marjoram and saffron may have an appropriate place. A combination of flowers, fruits and vegetables is often made, but it is for utility rather than from choice.

The size of the garden depends upon the wishes and circumstances of the owner; along shore you sometimes see one established within the confines of an unseaworthy dory, but a kettle or a single red tub is too small. Under other conditions several acres or the fractional part of one may be advantageously planted for pleasure. Where the selection of the site is optional choose land which has a southern aspect, yet it is by no means impossible to have a good garden where the ground inclines to the north. Light, sandy soil is to be preferred to that of a clayey nature, and, above all, it must be well drained.

The arrangement of beds, borders and paths depends very much upon the lay of the land, i. e., the general contour, and upon the relation of the garden to the house, to existing trees or other natural advantages. Advantage should be taken of the natural surroundings; the confines of a good garden are by no means the boundary walls.

The details of making such a garden may be considered under four heads, viz., the general plan, the arrangement of beds, houses and paths, preparation of the soil and planting, care and management and choice of plants.

THE GENERAL PLAN AND ARRANGEMENT OF THE BEDS, BORDERS AND PATHS.

Having selected the site which, everything considered, seems best for the purpose, this not always being optional, the plan of the garden is to be made. This depends upon the dimensions and shape of the ground, upon the condition it is in at the time, and upon the presence of trees and shrubs to be saved or destroyed. It is well to deliberate for some time before making a beginning; it is better to go slowly at first than to make alterations after the plants have been established; it is not bad policy to make an allowance for extension at the start; by adding new beds from time to time we obtain the advantage of fresh soil for the plants. The general plan should include a belt plantation of small trees and shrubs to serve as protection on the north, to make a background for the flowers, and to give seclusion; this last, however, need not be insisted upon, and such planting should seldom be so dense as to give a shut-in appearance; in fact there should always be openings towards the south to afford sunlight, and in other directions where pleasing views are to be found. The shrubbery, if land is plenty, should be backed up by trees of larger growth to increase the shelter and add to the variety, or they might be planted in some cases as a screen to hide disagreeable objects. In front of the shrubs, forming a part of the same border, there could be a bed filled with the larger grow-

ing herbaceous plants at the back, while in front a good place could be found for varieties of more delicate habit. The space enclosed by such planting would consist of grass, beds and borders and the necessary paths. Some additions might be made such as arbors or summer houses.

The outlines of the beds may be curved or straight; the greatest latitude is permissible; the former are always good, while the latter seem especially adapted to some large gardens of rectangular shape where stately plants are to be grown in rows. Negative advice is to the point here; do not have fantastic figures, and avoid elaborate devices; it is not always necessary to have beds and plants in pairs; this is sometimes appropriate near the house, or to mark an entrance, but it should not dominate. Curved lines are most graceful and best give the natural effect which is desired. Let the beds and borders be ample; one good sized bed is better than hall a dozen small ones; it is easier to handle in the care and management of the plants; if too narrow it dries up quickly and is more difficult to make decorative. It happens frequently that the best place for the garden is directly adjacent to the house; this gives opportunity for borders along the foundation walls, thus not only securing a sheltered position for the plants, but also, by planting out the under pinning, improve the appearance of the building.

The extent of gravel walks should be reduced as much as possible; some are needed for the rougher work, such as the employment of carts and wheelbarrows, but the beds and borders should be surrounded by grass, which, with the background of shrubs, makes the best setting for gay masses of flowers. Grass, if well kept, is not easily injured by the feet, unless there is a continual going to and fro in one direction, as where a path is worn, or unless there is persistent standing upon the same spot, as on the tennis court. One gravel walk will often be enough for a large garden with many beds.

The walks and beds sometimes are bordered with plants of symmetrical growth, such as box, which may be kept clipped, or with thrift or chives which naturally have the formal shape suitable for this purpose. Box, unfortunately, is rather tender and difficult to establish; it can be done, but one must persevere in spite of failures; give plenty of water during hot weather and cover with litter from December until April.

Where, instead of a simple border to a bed, something in the nature of a hedge is required, there are two good plants of recent introduction to recommend: Spiræa Thunbergii and Berberis Thunbergii, both Japanese. The first has attracted much attention this fall in this vicinity by the bright autumnal tint of the leaves unusually late in the season; it has a delicate habit, but is perfectly hardy, and has a profusion of small white flowers early in spring. It can be trimmed if desired, but should generally be left untouched except by taking off the old flowering shoots after the blooms fade. The growth is so thick that it makes a complete screen, but it is not stout enough to serve as a fence. The Japanese barberry is shorter and stubbier and admits clipping, although it is not improved by this treatment; it is of dense growth and so thickly covered with thorns that it will easily keep out cats and dogs when well established. The foliage is excellent, giving fine and bright colors in October; moreover, the bright red and persistent berries and the rich warm tint of the twigs make the plant interesting all winter long.

PREPARATION OF THE SOIL AND PLANTING.

Much of the future success of the garden will depend upon good soil and careful preparation. If the soil is heavy add leaf mould, peat or sand; the first is always grateful to plants during the dry and hot weather, and can often be used advantageously as a top-dressing; first for protection during the winter, and then in spring it can be worked in just under the surface of the ground. Well rotted barnyard manure is of the same nature and can be applied in the same way. It is good policy to have the beds made in autumn in anticipation of spring planting. Where the undertaking is not too expensive the land should be trenched, at any rate for the more important and less easily grown plants. In this process the earth is completely turned over to the depth of two feet or more, thus giving an opportunity to remove stones, roots and the poorer portions of the soil and to mix with it plant food at such a depth that it will be efficient for a long time. If trenching is too costly deep plowing or spading can be practiced, and the manure worked in at the same time. It is never a good plan to throw out the old grass roots; let them remain; they will gradually rot and improve the physical condition of the soil besides furnishing nourishment to the plants. If the beds and borders are once thoroughly prepared by trenching they will last a life time, and the future care will be lessened. This is particularly important on account of the method of planting some times employed. I refer to the succession of thickly planted crops which does not always permit annual forking and stirring in spring, but leaves them without this renewal for two years or more.

The greater part of the planting, trees, shrubs and most of the herbaceous plants, is best done in our climate in spring. Dutch bulbs, however, are always planted in autumn. This is also a good time for transplanting on your own place, but not for setting out those plants which are received from distant nurseries. Herbaceous plants require lifting and separation at intervals of from two to ten years or more, otherwise they run out, i. e., they degenerate; the growth becomes poor, the flowers few, and they are overrun with weeds. German iris, lilies, phlox and pæonies are good examples; they must be dug up and divided, a part perhaps thrown away, then re-set. By this treatment the weeds can be destroyed, manure worked into the soil and a general renewal of bed and plants effected. This work can be done in April, but the early part of September is equally good, and often more convenient.

All planting should be done firmly; work the soil in and among the roots, pressing it hard with hand or foot; never use water until the work is completed and then only in hot and dry weather. In growing seeds the same directions are to be followed; it is better to force the earth down with your foot than pat it with hand or trowel. The lighter and more carefully prepared the soil, the more need to observe these directions, many failures not always resulting in death, but apparent in poor growth, are due to lack of sufficient firmness in the ground around the plant newly set.

CARE AND MANAGEMENT.

These matters have been outlined above to some extent; there still remains, however, something to be said. Much of this work consists in gaining an intimate knowledge of the plants themselves, noting individual peculiarities which will differ with soil, treatment, position and season. This information, although often intangible, is important, and it is only by acting in accordance with such observations that our skill in cultivation can be improved. We sometimes hear this called love of plants and applied to a person who has these faculties highly developed, but it is only another way of saying that by learning their requirement we are able to give better care. It is the real science of gardening, not as yet formulated.

The details of ordinary cultivation are simple; weeds must be kept down, often by hand; the ground must not only be kept clean, but it must be frequently stirred. The common hoe is too large and cumbersome for this; one made with a single long narrow tooth is convenient. Water should be given freely towards evening in the hot and dry July and August weather; it is better to give a quantity once or twice a week than a little every day. It is not a good plan to begin to water unless it can be kept up as long as the weather requires.

Protection during winter is advised; it is, however, often applied too early; let everything be in readiness by the middle of November, but do not cover until from the 1st to the 15th of December, just before severe frosts. If rotten barnyard manure is used a double advantage is given; the plants are kept in good condition, and from the leachings and finer portions of the dressing they obtain food. Leaves and pine needles are also good material for this purpose; the former are apt to blow away in exposed places and must be held down by pine boughs, which serve also to give a neat appearance, particularly to the beds near the house. The covering need not be very thick—two to three inches is enough; it is not intended to keep out the frost so much as to prevent alternate freezing and thawing by which the plants, especially the small ones, are thrown out, the roots broken and exposed to sun and air. If the ground is kept frozen all winter, as it is by a slight protection, this is avoided.

It is a good plan to have somewhere near the garden, but not necessarily a part of it, a piece of ground which might be called the nursery, in which some plants may be kept to take the place of those which pass by, which fail or for any reason prove unsatisfactory, and in which others could be propagated from seeds and cuttings. Unless a greenhouse forms a part of the establishment, a cold frame, pit and hot-bed put here would prove very convenient. An illustration of this use and also the method of a succession of crops may be helpful. Tulips are planted in October and begin to show above the ground in April, when the winter covering is removed and the soil loosened with a hoe; then poppy seeds are sown broadcast over the bed; they will come up and flower in June and July, just after the tulips pass away. Unless something were planted to follow the poppies there would be a bare space during the remainder of the summer; this is prevented by growing in the reserve plot a batch of African or French marigolds, we will say, which, transplanted in June, will keep the border blooming until frost.

CHOICE OF PLANTS.

Equally with the shape and disposition of beds and borders the plants form a distinguishing characteristic of the old fashioned garden; some may be more appropriate than others, due perhaps to associ-

ations. I have spoken of the need of protection and background. Among the larger trees suitable for this purpose are the white pine and white spruce, unless the soil be poor, when the Norway spruce and Scotch fir are more easily grown. The hemlock is good where a more delicate ground is required and is excellent when something is needed to break the space between the larger trees and shrubs, borders or lawn; so are the Japanese cedars, if the position is sheltered. The blue Colorado spruce (Picea pungens), Douglas fir and Abies concolor may be recommended for planting as specimens or in groups, but are not sufficiently tested for our climatic conditions as yet to warrant their use in large quantities. Intermingled with these evergreens or on the outskirts of the garden, but kept well away from the beds, 60 feet at least, on account of their roots or shade, some deciduous trees can be planted; the American or English elms and beeches, sugar maple, American linden, chestnut and oaks, the tulip-tree, the yellow-wood, the horse-chestnut, red or white, willows, the golden twigged and the laurel leaved are fine, and Lombardy poplar where a quick growth is desired for any reason; white birches for nurse trees; these are all large and need ample room for growth; again let me say they must not be allowed to interfere in any way with the borders in which the herbaceous plants are placed. Among the smaller trees, which, in connection with the shrubs to be named hereafter, may form the immediate background for the flower beds, are the crab-apples, Pyrus baccata in many varieties, of which Parkman's is the best; the flowering plums and cherries, Prunus pendula P. pseudo-cerasus, fl. pl.; the double flowered peaches are good, but short lived; the halesia or silver bell, laburnum, Bohemian olive, hawthorns, flowering dogwood, magnolia, etc.

For large shrubs, lilacs in many varieties, not only the common, but also the Persian and two new sorts just introduced, Syringa Japonica and S. Pekinensis; philadelphus (the mock orange), Forsythia, Cornus mascula, Hydrangea paniculata grandiflora; snowball, the common and the new Japanese, are together with many other less well known viburnums; witch-hazel and exochorda are good selections.

For shrubs of intermediate growth we have azaleas, althæas, Japan pear, Spiræa Van Houttei and S. prunifolia, the Japanese roses, red and white, and our own wild roses. The hybrid perpetuals have a place here, also the Sweet Briar, the Persian yellow, Scotch, Provence and other old garden favorites; the running roses may be placed in the same category; all should be planted. It must be said, however, that although the rose is the queen of the garden, these last named sorts, unlike the wild varieties from Japan and from our own fields, are interesting only when in bloom; moreover, unless exceptionally good care is given, they are unsightly even at this time. The trouble comes from the attacks of leaf eating insects, and, although the remedy (spraying with hellebore and water) is simple, unless it is carefully attended to the plants become leafless. I should therefore advise that such roses be kept in the background; let them be a part of the garden, but not be placed in a too conspicuous position; if they must come into prominence let the fight against the insects be pushed with determination.

For shrubs of still smaller growth there is Deutzia gracilis, tree pæonies, some varieties of the shrubby St. Johns wort, and Rosa Wichuraiana. For evergreen shrubs, mountain laurel and rhododendrons take first place; Andromeda floribunda, Leucothœ Catesbeii, Daphne cneorum are less hardy. For conifers the creeping juniper, Taxus cuspida and American yew are excellent. For fruiting shrubs plant black alder, barberries, burning bush, high bush cranberry and symplocos with its numerous blue berries. The scarlet dogwood and golden willow are always bright and cheery in winter. Some of these can be used effectively as specimen plants standing by themselves, but most of them are more pleasing planted in masses, from 6 to 20 or so in a clump. Vines should be trained on trellises or posts; when used for porches or piazzas it is best to employ a single variety; for this there is nothing better than Hall's Japanese honeysuckle. Others which might well be planted are wistaria, Clematis Jackmanni, C. virginiana and C. flammula, the Virgin's Bower, and a new September blooming clematis, C. paniculata, all these strong growers; Rosa multiflora is an abundant bloomer, a vigorous grower, untouched by leaf-eating insects, and is thickly covered with fruit; so is Celastrus scandens, the bittersweet; Akebia quinata is one of the most delicate; the Dutchman's pipe, one of the strongest growers. In shady places plant Indian currant and Rubus odoratus.

A few of the shrubs named above and others omitted for lack of space, might well be put in the garden proper to emphasize or mark a period as it were, but herbaceous plants are the principal feature; the trees, shrubs and grass are the setting. Dutch bulbs open and sometimes end the season; they are easily grown, and always satisfactory; they are not expensive unless new and choice varieties are sought; and although some kinds of tulips and hyacinths do not succeed so well as might be wished in our climate, it is not difficult to replace them. It is not necessary to dig them up, and re-set them every year; indeed this is a great mistake with narcissus, crocus, snowdrops, and squills. The special care which must be given is to provide a light and rich soil doing everything possible to secure a good growth during their short season, then make over the beds, once in three or four years dividing the old clumps and adding new bulbs to supply deficiencies. They are most effective planted in masses that will bloom simultaneously, i. e., crocus and snowdrops each by themselves, and in the same bed; the Duc Van Thol tulips in one group, the early tulips in another, the late tulips in a third. To obtain early flowers, a row can be planted along the foundation wall of a building, where the warmth from the stones or bricks will hasten their growth and the blooming of the bed begin in March instead of April. It is astonishing to see how much severe frost apparently delicate plants will stand under these circumstances; it is always well not to entirely remove the litter which has protected them during the winter but let it remain at hand until the frost is entirely out. The snowdrop is the first to open, then crocus, winter aconite, chionodoxa, iris, squills, hyacinths, tulips and narcissus, in many classes and varieties and always in profusion. They make the beds gay at a season when flowers are valued, they are like the note of the bluebird, a welcome assurance of the coming of spring. The beautiful display of tulips in the Public Gardens in Boston is well known. It is a pity that the narcissus is not more commonly grown; it is a plant of all others for the old fashioned garden, and should be used in large numbers. One of the best effects in wild gardens I have ever seen was obtained by dibbling into the rather thin grass quantities of these bulbs, the daffodil and single and double pheasant's eye narcissus. By letting the lawn go uncut a week or two longer than usual, pretty effects can be made in the same way with the crocus and snowdrop; their leaves must be left until they begin to turn yellow. The late tulips, Allium Moly and the Narcissus poeticus close in May and early June the procession of spring blooming bulbous plants, but towards the end of August, the colchicums throw up their flowers from the bare earth and still later the autumn blooming crocus of which the saffron C. speciosus is best.

Tall growing perennials, suitable for planting next the trees or shrubs, at the back of the borders, on the outskirts, or wherever height is desired, are Bocconia Japonica, Polygonum Sieboldii, Helenium autumnale, many varieties of sun-flowers including annual sorts, wild asters and golden rod, these last responding very kindly to cultivation; marsh mallows, hollyhocks, and in sunny sheltered places chrysanthemums, not the gorgeous affairs from the florist but the survivors which are sometimes to be found in old country gardens. As with bulbs, these should be massed, but so vigorous is the growth, that a single specimen is often sufficient. Put hollyhocks in rows if you like, but avoid, with these as well as with other striking kinds, the common mistake of planting in numerous, small and isolated groups, reproduced all over the premises, at regular intervals. A certain amount of repetition is permissible in large gardens or where formality is desired but it is an error in small places where a more natural style is sought.

Among herbaceous perennials of intermediate size we have: pæonies, monkshood, larkspur, columbines, Japanese anemones, spiræas of many sorts, poppies, phlox, Japanese and German iris, lilies, day lilies, Solomon seal, gaillardia, cardinal flower. And with these may be classed foxgloves, Canterbury bells, and sweet williams, which are really biennials as is the hollyhock, but under cultivation either their habits change, or from the self-sowed seeds the supply is renewed. Some pinks and carnations belong to this category, so do forget-me-not and Iceland poppies; precautions of some kind must be taken to keep up the stock.

Alyssum saxatile, moss pink, arabis, iberis, dwarf iris, lily of the valley are all hardy, charming, and effective in masses, while some are excellent for bordering the beds and paths. Violets belong here, one of these called the Schonbrun is delightful, dark blue, sweet scented, and an abundant bloomer; so hardy that they often bloom at Thanksgiving or Christmas in sheltered places in favorable seasons; indeed they may be looked for at any month except the middle of summer; they propagate themselves by seeds and oftentimes they grow wild in the garden. The English violets, blue and white, double and single, are very like them but not so easily grown; one of these is called red, but is as dismal a failure as the pink lily of the valley. Our wild Viola cucullata from the swamps, the birds-foot and its variety called the pansy violet are without much perfume, but nevertheless desirable. Pansies, daisies, for-get-me-not, are short-lived and a little tender, unless planted in warm spots; they succeed best if they are grown annually in cold frames from seeds which are sowed at the end of August and transplanted into the beds the following April; the English primrose,

and all its varieties, polyanthus, cowslip, etc., can be treated in the same way, except it is better to sow these seeds in spring, and keep them in a nursery plot all summer. The new bedding violas, crosses, may stand our winters better, but the chances are that they too must be handled in the frame; the old ladies delight or Johnny jump-up is the only plant of this class which thrives the year round in our climate.

It is practically impossible to keep up a succession of flowers without using some annuals; the hardiest of these should be sowed when the frost first leaves the ground; larkspurs, poppies, eschscholtzia, sweet alyssum, mignonette, bachelor's button, calendula, coreopsis and morning glory. Sweet peas should be planted early; it is always difficult to find a suitable place for them, particularly when garden room is limited; it is almost impossible to keep them in good condition all summer long. Like some of the roses, they should not be put in prominent positions, they can be relegated to the vegetable garden or they can be thrown away when their first freshness passes. If a trench six inches deep is made, and the seed planted at the bottom, the soil can be levelled off as they grow; thus the roots will be deeper in the ground, and so better able to withstand droughts.

The seeds of nasturtiums, four o'clocks, Drummond phlox, asters, salpiglossis, schizanthus, portulacca, and tobacco should be sowed later; the ground is warmer "when the shad bush blooms," or when the "leaves of the white oak are as big as a mouse's ear," as they say in the country; this indicates the proper time to sow corn and beans, so too it is the time to plant the varieties just named. Zinnias, French and African marigolds are sowed last of all, about the middle of May; or, better still, sow in the frame or hot-bed in April, together with stocks, asters, and castor oil bean, and cosmos, thus getting thrifty plants, which may be set in the beds at any time before the middle of July, and economizing in the use of seeds. There are some good vines which may be treated in the same way, the moon-flower, cobæa, canary-bird creeper, maurandia, and Mina lobata, a pretty little plant from Mexico related to the ipomæas.

Bedding plants are convenient for filling gaps left by the spring flowers; lemon verbena, scarlet and rose geranium, heliotrope, salvia, lobelia, fuchsia, French marguerite, planted in groups, or even singly if not too much scattered, are always interesting.

One more class of plants and the list is complete. These are the bulbous and tuberous roots which may be stored during winter in such a cellar as would keep potatoes in good condition; they are planted in spring when the ground becomes warm and should be dug, dried and stored before severe frost. Gladiolus, montbretia or crocosmia are the hardiest. Tigridia, tuberose, dahlia, caladium and canna need more warmth. If the cellar is furnace heated, they should be kept in a cool closet, or be packed in dry sand.

It is to be understood that the names of the plants here given are all desirable for such a garden as I have endeavered to describe, but a great many have not been mentioned. What these are can be learned by observation in different gardens, from books and from horticultural papers. An excellent book for this purpose is Ellwangers's "The Garden's Story;" another is Robinson's "Wild Garden," and "Gleanings from French Gardens," by the same author. Nurserymen's catalogues can be studied, these lists of plants and seeds are interesting and instructive.

The Anthracnose of the Rose.

There is a disease of the rose that on account of its obscure habit is often overlooked. The root galls caused by the nematode worms get the credit for doing some of the damage that should be ascribed to the rose anthracnose. This is a fungous trouble, and is not by any means confined to the foliage.

In order to bring the subject before the readers of the AMERICAN FLORIST a photo engraving of a badly anthracnosed plant is shown in Figure 1. The chief feature of this picture is the scarcity of leaves. Instead of a plant with foliage upon all the canes there are but few leaves upon some of the stems, while others are entirely defoliated. The whole plant is infested with the fungus, and this parasite so saps the vitality and interferes with the processes of growth that the leaves, even if they were healthy in themselves, are unable to perform their work. The fact is, that the leaves are infested with the anthracnose filaments, and soon after falling, if not before, they will show the spore formation of the anthracnose fungus *Gloeosporium Rosarum*. In general appearance and habits of growth this fungus is quite similar to the one causing the anthracnose of the raspberry named *Gloeosporium venilum*, and it is possible it is identical, the presence of the one being possibly a menace to the host of the other.

The rose plant is most likely attacked while young, or at least it is to be presumed that the young portions of a plant are most susceptible. The attack is from without, and the spores falling upon the surface of the young tender canes and leaves as well there germinate and produce in a short time an affected spot. If this takes place in a cane it is natural to suppose that the portion above the infested part will be girdled in so far as the attack is great, and this will interfere with the direct support by the whole plant of the part beyond the diseased place. Besides this the fungus spreads, and that more rapidly in the direction toward the tip of the cane. It is not unusual for a diseased plant to send up apparently healthy shoots from near the base of the stem, these in turn to become infested.

Figure 2 shows a diseased cane natural size, one taken from a living plant but without leaves. A careful examination of the cane will show that a point near the middle of the engraving is covered with small pimples. This is the place where the spores of the anthracnose have been formed in great numbers. An enlarged view of a similarly affected cane is shown in Figure 3. The spore masses are so much enlarged as to be readily seen. This is a piece of a cane, mostly the bark cut off, and made a subject for a microphotograph, but only magnified about five times. Each one of the projections from the surface consists of a mass of spores, and these when moistened flow away, while a multitude of others escape from the rift in the epidermis of the cane. These spores germinate with great ease, and from this fact and the vast numbers formed it is easy to conclude that the rose anthracnose is a very contagious disease.

Roses that have a sickly color to the foliage, with the leaves falling prematurely, especially from the tips of the canes, may be suspected as victims of the anthracnose. A hand lens should be sufficient to assist in finding pinkish blotches upon the leaves, particularly those that lie upon the moist earth beneath the half defoliated plant. Similar, but better defined, pimples usually occur upon some portion of the cane.

It will be gathered from these engravings and remarks that the rose anthracnose is a specific disease, caused by a well defined fungus that grows rapidly from spores, penetrates the substance of stem and leaf and finally causes defoliation and death of the cane. The anthracnose, because of its multitudes of spores produced in pimples on leaves, particularly fallen ones, and the canes, the ease with which they are transported by water and the rapidity of germination all combine to make this fungus enemy of the roses very contagious.

This class of fungi to which the gloeosporium belongs is amenable to treatment by fungicides. A coating of Bordeaux mixture or ammoniacal carbonate of copper upon the leaves and stems prevents in large degree the entrance of the germs. Therefore all rose houses where there is any anthracnose should be sprayed with one of the above compounds. It goes without further saying that all plants that are as shown in Figure 1 should be either cut down close to the soil or thrown bodily into the burn heap.

BYRON D. HALSTED.

The Rose Problem.

For answer to "A Rose Problem" of "Subscriber" (page 738) I would say, that in long houses, heated by hot water, it will be found advisable to add an extra line of pipe on each side, for say half the length of the house, and located in the center of the house lengthwise, to equalize the heat at the ends, arising from the boiler and cross pipes there.

If "Subscriber" will notice the roof of the house during hard freezing weather he will see that the heaviest coating of frost is at the center of the house lengthwise, growing less gradually toward the ends, where there will probably be none at all.

W. T. BELL.

Franklin, Pa.

SEVERAL FRIENDS in the trade have favored us with long stemmed roses lately, and among them were some fine specimens from Nanz & Neuner, Louisville, Ky. American Beauty, La France, Duchess of Albany and White La France (Augustine Guinoiseau) were the varieties represented. They were all fine flowers, with splendid stems, but we were especially impressed by the White La France; the flowers were very large and the delicate flesh pink hue exquisite. It appears a vigorous grower too.

SOME very fine Catherine Mermets were recently received at this office from Amling Bros., Maywood, Ill. In addition to fine color they were noticeable for their extremely long, firm stems and fine foliage. The growers write us that these

Fig. 1. *Fig. 3.* *Fig. 2.*

THE ANTHRACNOSE OF THE ROSE.

flowers were from three year old plants grown in solid beds, with a night temperature of 56° to 58°. They are firm believers in solid beds, thinking there is less danger of drying than in benches.

Miscellaneous Seasonable Hints.

From the 15th to the 20th of this month is the right time in this latitude to sow the main crop of summer annuals, including asters, Phlox Drummondii, zinnias, marigolds and ten week stocks. The most important of these to the florist is the asters. Truflaut's pæony flowered and the Comet sell the best with us. I sow all the annuals in flats of two inches of soil in a temperature of 50°, and when large enough to handle transplant into flats about one inch apart in three inches of soil. The season will then be far enough advanced to place the flats in a cold frame or mild hotbed where they thrive much better than in the greenhouse.

A common plant used largely in veranda boxes and vases is the nasturtium. They come up easily and quickly and when potted into 2½-inch pots should be placed on a light dry shelf and don't use too rich soil; you want them to flower quickly. The tall growing kinds are the best for above purpose; not getting much root room they make only the desired growth and flower all summer. Sow middle of this month.

A cheap summer climber and one always in demand is the Cobæa scandens. Sow the seeds in light soil with one third sand. Don't scatter the seeds and cover with soil as you would with almost all seeds. Prepare the surface evenly but not too solid and press each seed into the soil on edge and no covering is needed. Water moderately when sown and after that be very sparing of water till growth starts.

If your violet house runs east and west with the broad side to the south a light shading will greatly help them; if given too much bright sun the flowers will come small and stems short.

We are putting in the last crop of carnation and rose cuttings. Both of these are in plenty of time if taken good care of and grown right along.

I have been asked several times how many weeks before Easter should the crop of tulips and narcissus be brought in to force. It depends very much what date Easter comes. This year it is unusually early. I would say this year allow three weeks for them inside and you will be sure to hit the mark. There is little real forcing needed now with these bulbs, as they grow tall enough without shading and come along fast enough in a night temperature of 55° to 60°.

A correspondent inquires "how to have nice smilax during February and March?" If you have cut your bed close down at Christmas or New Years you can't expect good strings again by February or early March. But as smilax is an all the year crop I will briefly state my method of growing it, and with proper heat and care four or even five crops should be obtained in the year. The bed should be composed of rather heavy loam with one fourth good manure. It should be on the ground and not less than nine or ten inches thick. You should have healthy young plants to start with from 3-inch pots and plant as early in July as possible. Don't neglect to put strings to them at once. If during the winter you can keep up a night temperature of not less than 60° (65° is better), there won't be any trouble in getting at least four good crops. The first at end of September, the next at the holidays, another early in April and another in June. When you cut smilax don't cut a fine string here and there through the bed to please any one. Begin at one end and clean the crop as you go. The great reason for this is that smilax should not be watered for a week or two after it is cut down or till the young growths have got a good start. A heavy watering just after they are denuded of all their top will rot the roots. To obtain the best results after the second crop is cut the bed should receive a good mulching of manure and loam in equal parts sufficient to well cover the fleshy roots which by that time will be sure to be showing themselves on the surface. I believe it pays to replant your smilax bed every summer.

Buffalo, N. Y., March 6. WM. SCOTT.

Seasonable Hints.

Jos. Renard, of Unionville, Pa., grows gladioli very successfully among his carnations, and his method he writes us is about as follows: If early flowers are wanted the bulbs are planted when the carnations are well established in the benches. The distance apart is not material, but if too close they will make too much shade. A row to every third carnation row is about right and eight inches apart in the row. They are tied to stakes as soon as the foliage is large enough. Good ripe bulbs will bloom in about four months at a temperature of 60°. At 50° five months will be required. The forcing of the bulbs is not at all injurious to them if they are properly attended to after flowering. Mr. Renard has bloomed some of his stock at least five years in succession. Great care is needed in taking care of the bulbs after they have done their work. They must then be thoroughly ripened, giving a little water until the tops all turn yellow, when the water should be stopped and the ground allowed to become quite dry. They are then taken up tops and all and dried in a dry and shady place. If not pulled at the proper time a new growth will start and ruin the new bulbs. After drying for 60 days they are ready for forcing again or may be held a much longer time for that purpose.

Sweet peas are frequently grown as an accessory crop and may take the place of tomatoes. To have them bloom early the seed should be started in September or October. One seed is placed in each 2½-inch pot. When the plants are large enough they are set among the carnations much in the same manner as to distance, etc. as tomatoes, and tied up in much the same way. They are probably less troublesome than tomatoes, and much less heat is required to force them along. If a good crop can be obtained by Easter they are quite profitable and sell readily, but at a low price well into the summer. In marketing they are tied in bunches of 25. Blanche Ferry is the most popular sort, but all varieties and colors are grown. W. R. SHELMIRE.

Avondale, Pa.

Chester County Carnation Society.

This society met at West Chester, the county seat, March 4, in the rooms of the Fame Fire Co., courteously offered for the occasion.

The table was generously decorated by Jos. Kift & Son, and the society exhibited 3000 or more carnations, representing the best of the old and new varieties, and interspersed here and there with some notable seedlings.

A vase of "Cæsar's babies," from Shelmire, looked as if they had been fed on Mellin's food, or kainit, or something very nutrient. Others from Messrs. Styer, C. J. Pennock, Edwin Ladley and Edwin Swayne were noticeable for size or beauty.

The people of West Chester were very much pleased with the exhibition, and one of our members enthusiastically declared it was equal to the display at Pittsburg.

A short business meeting was held, and various subjects discussed, among them the feasibility of establishing a Floral Exchange for the purpose of distributing flowers to the florist without the intervention of the commission man. No conclusion was reached.

A resolution was passed commending strongly the action of C. J. Pennock in sending out word to those who had ordered Grace Battles of him, that the stock is affected with rust, and they were free to cancel their orders if they wished. It is of course a great disappointment to all concerned, but the society felt like placing the seal of its approbation on such straight-forward dealing. E. S.

Size of Carnations.

A. H: Replying to your inquiry regarding the special carnation number, where a number of flowers were shown on one plate the comparative size of the flowers was preserved, but not where the flowers appeared on separate plates. For instance Ophelia and Helen Keller are nearly the same size, but the former appeared smaller in the plate because the reduction in photographing was greater. Therefore a comparison of the flowers as to size would not be fair. But where a group appears in the same plate the comparison is accurate because the reduction on each was the same.

Effect of Soil.

That the widely different results obtained by various growers of the same varieties of plants is largely due to the difference in soil, though this is often modified by variation in treatment, is now pretty generally understood. A very conclusive bit of evidence as to the correctness of this assumption was recently brought to the attention of the writer.

Mr. Alfred Saxon of Downer's Grove, Ill., has on his place two very distinct kinds of soil. On the higher ground it is a strong yellow loam, while on the lower lying parts the soil is the dark mould so common in Illinois. In planting his carnations last year Mr. Saxon used both these soils in his benches. As a result the plants bedded in the loam are remarkably vigorous and productive, while those in the black mould are not doing nearly as well, seeming to have no substance and decidedly lacking in vigor. The difference in Silver Spray as grown in the two soils is especially marked, it doing grandly in the loam and but very indifferently in the mould, though the treatment given each batch is practically the same.

But his violets, which are planted in the black mould in frames, have done grandly. He feeds his violets very heavily and begins to believe that they can hardly be over-fed. Before planting the soil was heavily enriched with well rotted manure and as soon as the plants began to grow strongly he fed them frequently with liquid manure. He considers it wise to shade them from strong sun and during the middle of sunny days he shades the frames with boards laid diagonally across the bed with only small spaces between them.

He has been very successful with mignonette the present season. All his plants are in solid beds, but in making up one bed he laid a surface of bricks on the ground and put 8 inches of soil on top. But the plants in this bed have not done nearly as well as in the others where the roots were able to go deep down in the soil. In such beds he has noted plants whose roots extended fully 18 inches deep in the soil. And such plants gave the best results. Certain it is that the mignonette wants a deep cool soil to insure good returns. He uses the Machet. He planted the seed the latter part of last August and had a good cutting of flowers for Christmas, but he will plant about August 1 this season and will then have a larger crop for the holidays. When those voracious green worms that are so fond of mignonette get a foothold in the house he finds he can catch them readily by laying a newspaper over the plants for the night and in the morning the worms in the bed will be found attached to the under side of the paper from which they can be readily shaken off into the walk and killed. But this evil should be entirely guarded against by keeping the house close and with netting over the ventilating spaces so that the moths may be prevented from entering the house and laying their eggs. G.

Locomotive Boiler for Heating.

In reply to the question of Subscriber on page 690 of your paper I beg to reply, that it is not always advisable to indiscriminately use either a locomotive boiler or a plain cylinder tubular boiler to generate heat in, either for steam or hot water, unless the conditions of work, design and fuel are taken into account.

Locomotive boilers are good things in their way, but with a soft gaseous fuel and short tubes, they are a long way from being economical. If Subscriber wishes to use a boiler of this type he will find it will give the best results if he uses anthracite coal, but he must see to it that it is plenty large enough for the work to be performed and that the tubes are longer than is generally found in a ready made boiler of this type, and that they are not small in diameter, for with a soft coal it is better to use a boiler with a few number of large tubes than with a large number of small ones, for while it has been customary to calculate the horse power from the heating surface of these tubes, in connection with the surface of the fire box, it has been found by careful observers that there is such a thing as going too far with the rule.

If Subscriber has a large house and the situation will permit it he will secure the best results in economy by using a plain tubular boiler set in brick work, properly proportioned, and at the same time use soft coal for fuel.

A combination of fuel, of soft coal and wood does not operate well together, as the wood requires but little draft and the coal considerably more, furthermore the nature of the wood may require a different shaped grate to get it into the furnace; if this should be so it can be accommodated by making the grates longer and narrowing up on the sides, for it will not be found advisable to place a large grate under any boiler where such inflammable materials are used as spoken of. The difficulty with wood will be found to exist in regulating the generation of heat which can be best done by using tight doors at the ash pit and leaving the damper well open, this will retard combustion and at the same time keep the tubes clean.

Clean tubes are an item of importance, and in cold weather can not be cleaned too often, for the slowing up in the day time on sunshiny days does more to fill the tubes in a boiler than a week's sharp running with a good load on the system.

A combination of steam and hot water does not necessarily mean economy, for with a proper system of piping the tem-

ALPINIA VITTATA.

perature can be regulated to a point conforming to a nicety, which in most cases is where the great trouble lays, while the saving by allowing the temperature in the boiler to drop would be a difficult thing to measure, providing it is of proper proportion and set accordingly.

With reference to the banking of the fire at 9 in the evening so that the temperature can be maintained all night without attention, I will say, that much depends again upon the size of the house; with a large one it would not be advisable to depend upon it, but with small jobs it can be done by using a staple fuel and a temperature regulator, to control the damper, this, however, would not be reliable with wood as a fuel, for with such fuel it is difficult to gauge the amount put into the furnace, such an arrangement would work to the best by using hard coal and could be readily applied on a single house of moderate proportions.

Such an arrangement, however, can hardly be termed "banking." To bank a fire means to deaden it by covering it with green coal or wet ashes after it has been pushed to one side or the end of the grates so that it will not go out for several days; in such a condition it does no work, but simply lays dormant. The above arrangement would be more in the form of "charging" a fire, so that it will perform the required amount of work for a considerable length of time without attention. JOHN ERWOOD, Mech. Eng.

Chicago.

Alpinia Vittata.

This plant is highly spoken of by several of our large growers of decorative plants, and is believed to have a great future as a commercial ornamental foliage plant. It is of good substance, has great vitality and is of easy and moderately rapid growth. The foliage is handsomely variegated green and white. The plant here shown is two years old, in 7-inch pot, and about 2½ feet high. We are indebted to Messrs. Siebrecht & Wadley for the photograph.

Things to Know About Bank Checks.

Bank checks possess many advantages for the conduct of business and are used to a proportionally great extent. They are in nature but orders for the payment of money, and are payable in the order in which they are presented, not according to that in which they are drawn. As given in the usual course of business they do not constitute payment of the indebtedness for which they are given, until paid. Nor will the concurrent receipting of the debts for which they are given change this. If they are not paid on proper presentation resort may be had to the original claims. The rule is, however, different in this respect as to certified checks. So the having of checks certified constitutes payment as to the persons drawing them.

Checks should be dated. If not dated at all, and they do not contain any statement as to when they are to be paid, they are never payable. They may be ante or post-dated as well as dated on the day of delivery. By being ante-dated they may be made to cover prior transactions and in a measure determine the relative rights of the parties to them, provided that no fraud is intended or done. Post-dating, in the main, determines date of payment. When post-dated so as to fall due on Sunday they are payable on the following Monday. Checks post-dated or maturing on legal holidays should be presented the day following. When post-dated checks are paid before the dates mentioned the money paid on them can be recovered. If blanks are left for the dates the holders of checks are thereby authorized to insert the true dates of delivery, but no other dates, and if they insert any other dates it makes the checks void. Changing the date of checks without consent of the drawers will do the same.

The presumption is that when checks are drawn funds will be provided at the banks on which they are drawn to meet them; but presentation for payment must be made within a reasonable time. If not so presented the holders will be charged with any consequent loss. Where persons receiving checks and the banks on which they are drawn are in the same place they should be presented the same day, or at latest the day after they are received. Where they are in different places the checks must be mailed to some bank or person at the place where payable before the close of the day following their receipt, and the latter must present them before the close of banking hours on the day following their receipt there. No extra time will be gained by holders depositing checks in their own banks for collection. After duly presenting checks it is also the duty of the holders, if they are not paid, to notify the drawers before the close of the next secular day following the presentation and dishonor. No particular form of notice is required. It may be written or verbal. The principal cases in which losses occur from failure to use due diligence in the collection of checks are where the banks on which they are drawn fail in the meantime. If the banks continue solvent the drawers will remain liable to pay their checks for months at least after they are drawn. Presentation and notice of dishonor will also be dispensed with where there are no funds to pay checks, and where the banks on which they are drawn suspend payment before they can be presented, using proper diligence. After receiving checks they must be presented for payment unless such presentation would be useless before the original claims can be sued on, for by accepting checks there is an implied agreement to use that method of procuring the money for which they are drawn.

Where checks are negotiable and pass by indorsement or delivery the same degree of diligence will be required of each person to whom they are indorsed, in order to hold those indorsing them, as is required of original payees to hold original drawers of checks. But by putting checks in circulation the liability of the drawers can not be prolonged. They must be presented within the same time by indorsees as by payees. Still where checks are passed from hand to hand one or more of the later indorsers might be held where earlier indorsers and the drawers would be released as by failure of the banks drawn upon.

Signatures to checks may be written with pen and ink, or pencil; they may also be printed or stamped. Banks are only required to see that the names of the drawers of checks correspond precisely with those of the persons to whose credit the deposits have been made. Who should sign the checks of corporations will be determined by the state laws, by the charters, by-laws, or by the usage of the particular corporations. Every partner has the right to sign his firm's name to checks unless prohibited by its articles of co-partnership. So also can agents sign them when given express or implied authority.

As usually drawn, payable to certain persons named, or order, checks are negotiable. A valuable consideration for them will be presumed. They may be transferred by indorsement, or, if payable to bearer, by mere delivery. Defenses to them existing between first parties can not be raised against subsequent holders.

Philadelphia.

More snow, more rain, more slush and disagreeable weather, generally, has been our lot the past week. But with all business has been up to the average for the season of the year, prices remaining the same for all classes of flowers. There would undoubtedly have been a tumble in the hybrids, but for the extra demand at Washington; at least 1000 fine Brunners, Laings and Beauties were shipped there the past week, mostly by Anderson, Heacock and Burton.

Brunners are now bringing $40 to $60; Laings, $30 to $40; Beauties, $30 to $40; Mermets, Brides, LaFrance, $8; Cusins, Wattevilles, $4 to $6; Perles, Sunsets, Hostes, Niphetos, Gontiers, $4 to $5; carnations, 75 cents to $1 for short; $1.50 for long; a few extras $3. Romans and paper white are scarce and poor at $3; valley, plentiful, $2 to $3; callas, $6 to $8; and Harrisii $8 to $10. Ivy leaves are very scarce, and the price has advanced to $4 per thousand; they usually bring $2.50 for outside leaves, but those coming in now are from the inside.

John Westcott, of Laurel Hill Nurseries has a kind of monopoly of the ivy business, having a large wall on the inside of one of his cool houses covered with them.

By the way, John is chairman of the committee having in charge the banquet to be given Wednesday evening, the 15th inst., the second day of the spring show. It was for a number of years customary to have a banquet some time during Lent, but for some reason the practice was discontinued. It is now proposed to revive this festive occasion, and its annual recurrence may be looked for in connection with the spring shows of the Penn. Horticultural Society. All those of the craft that happen to be in this neighborhood at that time are hereby extended a hearty invitation to be present on that occasion. The entries for the exhibition are coming in very well, and the prospects for a fine show are very good.

In the bowling tournament now drawing to a close, Mr. Harris still leads the boys in the first class, being pushed pretty hard however, by Anderson and Brown. Campbell is leading in the second class, Nisbett in the third and J. McLean in the fourth. In a recent match J. Westcott put up a score of 568 in three games, an average of 189⅓ to a game; the record for these games is 595, also made by himself.

Robert Craig is suffering from a severe billious attack, sufficient to keep him confined to his room since his return from Chicago.

At the last meeting of the Chester Co. Carnation Society it was decided to have the next meeting, and also an exhibition of cut flowers at West Chester, the county seat. There are in Chester county 44 establishments whose principal crop is carnations. These places average four houses each, making over 170 greenhouses devoted entirely to carnation culture, save in the spring, when some of them give a little space to bedding plants to supply their local demand.

The meeting and exhibition was held last Saturday, March 4th, in the building of the Fame Fire Co., West Chester, at 2 p. m., and was very well attended.

The meeting was held up stairs and the exhibition in the engine room below. There was an earnest discussion on the question of establishing under the auspices of the society, a local floral exchange, or depot, either in Philadelphia or Kennett Square, the majority favoring Kennett Square. The matter after thorough discussion was deferred until next meeting. The object is to have members ship their flowers to the depot or exchange, and from there have them distributed more generally over the country, and not depend too much on the Philadelphia market, as the demand there is not sufficient to consume all flowers sent at paying prices. They want to keep up the price, and yet at the same time sell all their flowers. At present the returns are not satisfactory showing too many not sold.

This discussion over the meeting adjourned to enable the members to have a pleasant time with friends visiting the exhibits displayed.

About 50 vases, tumblers and pitchers were used to show the flowers, and Lamborn was shown by Styer, of Concord, very fine. He excels every one in this particular variety. He uses manure water very freely. Lamborn distanced all whites exhibited. McGowan was shown, but only of average size.

Warren Shelmire exhibited a jar of seedlings from Cæsar; one of them named Brutus was worthy of mention, fine form, stiff stem, color a dull red, a large flower. Another pretty one by Shelmire, secretary of the society, was H. M. Stanley, nearly like Sunrise, but an improvement in form like Buttercup, easy to root.

Ed. Swayne, of Kennett, exhibited a new seedling, quite promising, not named, very large flower, good stem, don't burst, color, deep carmine, fine form.

Golden Triumph, a new yellow, looked well, all flowers exhibited being large and fine.

The flowers were arranged on a long table in the front part of the engine house, and on a large table erected for the purpose. Down the center, J. Kift, of West Chester, exhibited large blooming azaleas, and on the outer edge a number of little ferneries. The pinks were interspersed between, making a very pretty exhibit.

Just as the show was well under way, an alarm of fire was sounded, and as the carnation show was between the engine and hose carriage and the street, things looked precarious for the carnations, but many hands soon lifted the whole table bodily to one side until the alarm, which proved to be a false one, was over, and engine and hose carriage back again. Then the show went on again. Quite a number of the citizens attended the exhibition, it being free, which West Chester people appreciate. Taken altogether the meeting and display was a great success, and seed was sown that will no doubt produce a new crop of carnation buyers.

K.

New York.

A meeting of those interested in the establishment of the New York Botanic Garden, recently held, was attended by a number of the most prominent and wealthiest men in New York City, and from the interest manifested there is now no doubt that the Botanic Garden is an assured fact, and that it will equal any in the world. The sum of $750,000 is now practically in hand, and $250,000 more is expected to be added. The site will be in Bronx Park, which combines all the variety of soil and scenery necessary for such an enterprise. Two hundred and fifty acres will be set aside for the exclusive use of the garden.

An appeal has been made through the daily papers by Mr. Jas. Dean, who has charge of the New York State Horticultural Exhibit at Chicago, urging the public to assist in making this department a great success. People having large and valuable plants are especially solicited to contribute them, and all interested in floriculture are asked to use their influence on behalf of this most important department, with the assurance that the New York Florists' Club will co-operate and assist by every means in its power.

In spite of the perpetual sing song of the daily papers about the unprecedented extravagance of society people in the line of floral decorations this season, and the consequent opulence attained by the florists, it is nevertheless undeniable that the season has been a generally unsatisfactory one to retail and wholesale dealers and growers alike. Things could not be in much worse condition than they are at present, and all are trying to extract some comfort and consolation from the fact that Easter comes early, and there is a prospect of a fair spring season to follow. The growers feel particularly disconsolate as they look at their empty coal bins which were supposed to hold enough coal for the entire season, and those who ventured deeply into bulb forcing, undergo an additional misery when they compare their bulb bills and the net results obtained from their unfortunate venture. Happy, indeed, should he be who has got his money back.

Roses are abundant and of finest quality as a rule. Julius Roehrs is sending in some handsome hybrids in several varieties. From J. N. May are also coming some of extra quality, especially Mabel Morrison and Baroness. Lily of the valley and all other bulbous stock continues very slow, tulips suffering perhaps more than anything else. Harrisii lilies are in the same fix and are almost unsalable at any price. Violets are overstocked also.

I. Fosterman will have some very handsome dwarf lilacs in pots for Easter. His hydrangeas are in splendid condition as well.

Thorley's window is one of the most attractive spots on Broadway. Dwarf lilacs, rhododendrons, ericas and clematis in pots are among the novelties shown.

Hanft Bros., for many years located on Fifth avenue, are about to remove to a desirably located store on Broadway near 26th street.

Boston.

On March 21, 22, 23, 24, will occur the annual spring exhibition of the Mass. Horticultural Society. This is one of the most brilliant and attractive exhibitions of the year, although not as much of a pecuniary success as is the chrysanthemum show. Premiums are offered for azaleas, orchids, roses, carnations and all kinds of spring flowering bulbs, etc.

The lecture at Horticultural Hall on March 4, was by Prof. Wm. P. Brooks, of Mass. Agricultural College, the subject being "Poisonous Plants." The paper was very interesting. The number of species enumerated by the speaker as containing poisonous properties in a considerable degree was surprisingly large. The poisonous properties of various species of rhus, aconite, water hemlock, solanums, etc., are well known, but Clematis paniculata and azaleas have not been credited generally with danger-

THE "WHITE LA FRANCE" ROSE—AUGUSTINE GUINOISEAU.

ous qualities. Speaking of mushrooms, edible and otherwise, the advice of the lecturer was to reject all excepting those whose non-poisonous nature is vouched for by some one thoroughly competent to distinguish and identify them.

Among the flowers on exhibition were some seedling carnations from Geo. B. Gill, among which were some promising varieties, and a new bright dark red named Jacqueminot, raised by Jas. McGregor, and exhibited by Peter Fisher & Co. The latter was awarded a certificate of merit. Jackson Dawson received a silver medal for a new hardy rose which he has named the Arnold. It is a cross between Jacqueminot and rugosa, the latter being the seed bearing parent. The foliage is intermediate, the flowers single, nearly as large as rugosa, but brilliant Jacq. in color, calyx smooth like Jacq. but the buds clustered as in rugosa; in fact a more evenly balanced cross could not be imagined.

The subject before the Gardeners' and Florists' Club on Tuesday evening, March 7, was "A Modern Idea for an Old Fashioned Garden," a very interesting paper with this title being read by Prof. B. M. Watson, Jr., of the Bussey Institution. Considering the general revival of interest in herbaceous plants and shrubbery the subject was very timely and acceptable, and Prof. Watson is well equipped to talk upon it. The essay will be found in full in this number.

Cut flower trade is exceedingly dull. There is nothing doing in the retail stores, and the street men cannot get out on account of bad weather, hence the wholesale men are also complaining, there being an entire cessation at present of the shipping trade as well.

Visitors in town, Mr. E. V. Low, of England, and Mr. Winfried Rolker, New York.

St. Louis.

The weather for the past week has been very springlike and the welcome sunlight has materially increased the supply of flowers, which still continue in good demand, much to the joy of the grower. Violets and Von Sions appear to be affected by the southern product, which is shipped here in quantities. When double Von Sions get to selling at $15 a 1000 and violets at 8 cents a 100 something is going to happen to the luckless grower.

The plant and seed trade as far as can be heard from is way behind this time last year, both in the mail and express lines, the main cause assigned being the prevailing gloomy cold weather. The expectations are, however, that when it commences there will be a heavy rush and all are preparing accordingly.

The stock as seen at the various establishments is in very good shape, being of nice shipping size. At Mr. Fillmore's (who, however, depends on a home trade) the houses were full to overflowing. He has with his usual modesty been keeping quiet while putting his energies into the building of a modern three-quarter span rose house 75 by 20 feet. It is about finished and is to be used during the spring months for plants and next fall is to be planted with carnations, and the St. Louis boys are backing it under Frank's able management to eclipse any "short span to the south" house in existence. Mr. Fillmore is in love with his steam heating plant and says nothing could make him change to any other system or arrangement.

At the regular meeting of the exhibition committee it was decided to report to the club advising the holding of a fall show, the amount to be offered in premiums to be about the same as last year. It was also recommended that the Grand Music Hall be selected as the place of holding the show and that the dates be November 7, 8, 9 and 10. It was also decided to add music during the evenings and make the admission price 25 cents during the day and 50 cents during the evening, children to be half price. It was further decided to recommend the offering of two tickets to each class in the public schools to be awarded to the best boy and girl scholar in them. The same rules as those used last year will be in force except that a deposit will be required from all entering for competition to amount to 20 per cent of the first prize competed for, entries to be made the Thursday before the opening of the show. Entries for specimen cut flowers, however, can be canceled without forfeiture by notifying the manager of the fact in writing the day before the flowers are to be staged. R. F. T.

Chicago.

Business continues to be fairly good, and stock is excellent in quality. There is a tremendous stock of daffodils in now, and they sell in large quantities, though not for a high price. The advantage of tasteful bunching of these flowers was noted at one of the commission dealers'. Daffodils from two growers lay side by side. Both were precisely equal in quality, but while one had bunched his daffodils very evenly, tying close up to the flower, the other had mingled foliage with his flowers, and tied them loosely, so that each flower was displayed. The result was that the loosely-tied bunches were all sold, while the others were awaiting a customer. The admixture of natural foliage with any flower sold in bunches is always an addition to the selling qualities of the stock, since it meets with the demands of the retail buyers.

Roses are in fine quality and good demand. Jacqs. have dropped a little in price, being far more plentiful; a few other hybrids are to be seen. In a short time we may expect a crop of good Brunners, which is always a favorite. Violets are plentiful now, but the demand is fully up to the supply. Lily of the valley is not quite so plentiful as other bulb stuff. In addition to the daffodils there is quite a supply of jonquils; Dutch hyacinths are more plentiful than Romans. But few bulbs are sent in in flats, though in some cities we see more sold this way to the store men than cut and bunched. They make a showy addition to the florists' window at this season.

Payne Bros. is the name of a new firm that has started in at Hinsdale. They will build two houses to start with and will grow cut flowers.

The Paris Floral Co. has been incorporated; incorporators, E. J. Harms, Noah F. Gary, and Jay P. Smith.

A recent visitor to Chicago was Wm. R. Phillips, representing Thos. W. Weathered's Sons, of New York.

Buffalo.

We are having by no means a very brilliant time in the cut flower trade since Lent came in. There has been altogether too many daffodils and tulips for the demand and winter still holds on with such a grip that people hardly yet get a chance to see the fine displays in the florists' windows. Violets sell as well as any flowers just now, but the price ($1.25 per hundred retail) is too low.

W. J. Palmer & Son are cutting a large quantity and good quality of several varieties of roses; particularly fine are their Mermets and La France.

Not only are most flowers very plentiful but prices have received a slashing cut. One of our largest growers and store keepers has his windows beautifully decorated with flowers and placards announcing the prices to the public and this is what they announce: "Tulips and daffodils, 50 cents per dozen," but worse, oh far worse is the rest. "La France and Mermets, 60 cents per dozen." When those who have to buy must pay $7 and $8 per hundred, the "margin" is very small.

Mr. George Fancourt, of Wilksbarre, Pa., gave us a call on Friday last. He is a large shipper of roses to this city. After a good look at several of the houses here he joined several florist friends at a pigeon shoot and greatly he surprised the Buffalo boys with his marksmanship. He was loaded for bear but seemed to have an eye for any game. Other visitors in town just now are Mr. Joseph Rolker and Harry Bunyard.

Although a little late in the day the writer wishes to bear testimony on behalf of the Buffalo men to the unbounded hospitality of the Pittsburg and Alleghany Florists' Club while attending the carnation convention. Not only was the banquet the most elegant affair of its kind ever arranged by any body of florists but the members were attentive to us during our whole stay. The writer was bound to leave at 11 p. m., in company with two of the learned professors and had actually to leave a quail untouched. But the game was of no consequence, it was the oratory of Mr. Patterson we so deeply regret missing. W. S.

Baltimore.

"Hard times, worse coming," seems to be the feeling as each successive blizzard finds the coal pile lower and trade not much improved, for a driving snow storm is about as serious a hindrance to flower selling as it is to flower growing; and we have had more of them than we wanted, by a dozen, this winter.

Lent does not seem to affect trade as much as the weather, but a combination of Lent, blizzard and inauguration day knocked the bottom out of things on Saturday, all who dared venture out going to Washington to assist at the national jubilation.

Flowers are plentiful and good, except roses, which are rather short and of generally inferior quality. The best at the Exchange the other day were a lot of Mme. Pierre Guillot and Mermet from Theo. Eckardt; the color and size were very good indeed, but the stems were rather weak.

The meeting of the Gardeners' Club was preceded by a meeting of the committee on the schedule for the fall show, at which Messrs. C. M. Wagner, Wm. Ekas, and P. Welch were present. This is an enthusiastic committee, and the club will find them quite capable of cutting out a lot of work, when their report is handed in.

At the club Mr. Geo. M. Cook was nominated and, under suspension of the rules, elected. As the next meeting will be the election of officers a motion to appoint and instruct a committee on annual banquet gave rise to a most unexpected and general discussion, on whether liquors should be provided or not, in which the temperance element of the club showed surprising strength and determination. It was finally decided to have liquors, and allow the temperance members to substitute soft drinks for theirs.

Mr. F. G. Burger called the attention of the club to the manner in which he had restored a house where the temperature had fallen to 29°, and everything was stiff. He built wood fires in the houses and raised the temperature to 50° and then syringed very freely several times. Restoration was complete, and no damage, except to a few calla leaves.

Mr. Ekas thought the wood fires dangerous and preferred tobacco smoke, and syringing. He lays moist tobacco stems in a long narrow pile five or six feet long, firing at one end. This keeps up a long continued smoke. Had saved camellia blooms when temperature was down to 26 degrees.

President Fraser thought it dangerous to raise the temperature too suddenly. His plan was to get it just above freezing point and keep plants shaded for a day or two.

The next thing taken up was a suggestion by Mr. Eckhardt, that a stock company be formed for the purpose of purchasing material needed by members of the club. After some debate Messrs Eckhardt, Seidiwitz and McRoberts were appointed a committee to formulate a plan, and report at next meeting but one.

Another debate was opened by the question, "will a 2-inch pipe get twice as hot as a 4-inch pipe, on the same boiler?" Messrs. Ekas and Sedidwitz led opposing sides on this, which opened up the old question of large versus small pipes, after which the meeting adjourned.

Sedidwitz has opened his new store.

Hermann has two seedlings of the Odontootouchem pulcherrimum; fine ones too. MACK.

JERSEYVILLE, ILL.—Trade has been good here this season in all kinds of cut flowers. The best demand is, however, for roses and carnations, but the scarcity and high prices have made a good sale for bulb stuff. Some more houses will be built here this summer to supply the increasing demand.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SEED TRADE—Situation wanted; experienced. L. COOPER, 68 Duffield Street, Brooklyn, N. Y.

SITUATION WANTED—In private or commercial place; 14 years' experience. Good references. Address X Y, care American Florist.

SITUATION WANTED—As foreman or manager; 12 years' experience growing plants and cut flowers, carnations, roses, ferns, etc. Address T E, Ashbourne P. O., Pa.

SITUATION WANTED—As foreman, by a first-class cut flower grower. Good cut flower worker and salesman; 22 years' experience. Address T U, care American Florist, Chicago.

SITUATION WANTED—By first-class gardener and florist; 15 years experience in this country; German, age 33; commercial or private. Address S. WEBER, 138 Hampson St., New Orleans, La.

SITUATION WANTED—By a young man, aged 19; 1½ years' experience in general greenhouse work; strictly honest and industrious. Board with employer preferred. GEO. BALZHISER, Terrace Park, Ohio.

SITUATION WANTED—As foreman by a thorough, experienced rose grower; knowledge of carnations, violets, bulbs, smilax and palms. Good cut flower worker and decorator. Married. Address R S, care Am. Florist, Chicago.

SITUATION WANTED—By single man, 32 years of age, as propagator or rose grower in commercial place; long experience as landscape gardener, and not unacquainted with nursery. Best of references. Address D K, care of this paper.

SITUATION WANTED—By gardener and florist who has devoted his lifetime to the business; successful rose grower, 20 years' experience; also a good design worker. Private or commercial. Experience in lawn and vegetables. Address S J, care Am. Florist.

SITUATION WANTED—By a first-class gardener and florist; married, one child; understand the business in all branches, lawn, vegetables, grapes, flowers and fruit trees, can take full charge of private place. Best references. Wife is a good cook. Address Z. L. GARDNER, care Am. Florist, Chicago.

SITUATION WANTED—By the 1st of April, by a practical florist, married, two children. German, 15 years' experience; thorough knowledge in roses, carnations, chrysanthemums, violets, palms, orchids, ferns, propagating, landscaping, mushrooms, vegetables under glass and out doors; sober and reliable. Private place in or about Chicago preferred; references. Good wages expected. Address CH. GEBHARDT, Mayfair, Cook Co., Ill.

WANTED—4,000 rooted cuttings of Daybreak carnations at once. Address WESTERN, care Am. Florist.

WANTED—Petunia plants—pink, crimson and variegated. Address with prices, VAUGHAN'S SEED STORE, Chicago.

WANTED—Practical florist; German preferred; $15 to $20 a month and board. Permanent place to good man. O. R. DEMMLER CO., Eau Claire, Wis.

WANTED—German florist who understands plants and cut flowers; reference required; state age and wages. A steady place to the right man. Address FREESE BROS., Bloomington, Ill.

WANTED—A competent and experienced single florist to take charge of a wholesale and retail establishment. Good references required. Address W S S & CO., Lincoln, Nebraska.

WANTED—A young man with some experience in greenhouses and a fair education. State wages per month, including board. FLORIST, Box 353, Middletown, N. Y.

WANTED—A good, active, sober man, experienced in roses, carnations and general greenhouse stock. Permanent place for competent man. Address HARKETT'S FLORAL NURSERY, Dubuque, Iowa.

WANTED—Immediately, competent and practical florist, to take charge of small place and grow general stock. State age, married or single, wages expected. Give reference. Address CERCO, care Am. Florist.

WANTED—A young man for general greenhouse work; must be sober, industrious and have some knowledge of general greenhouse work; state experience, wages expected with board, age, etc. JOSEPH BANCROFT, Cedar Falls, Iowa.

FOR SALE—Old established greenhouses in Western health resort, 3,000 feet glass, splendid stock. For particulars, address E T, care American Florist.

FOR SALE—Half steam pump and boiler; both new. Half first cost will buy. Address JAS. DAUGHERTY, Box 17. Madison, N. J.

FOR SALE—I will sell my rooted cutting business, greenhouses, etc., at a bargain; well established well advertised and growing. S. B. FIELD, Roselle, N. J.

FOR SALE OR TO LEASE—Eight greenhouses containing about 30,000 feet of glass within 12 miles of New York City. Enquire of A. HIBBINS, 130 Dodd St., E. Orange, New Jersey.

FOR SALE—Unequaled opportunity for a live florist to purchase a small, well-paying established business. For all particulars address Box 432, Haverstraw-on-Hudson, N. Y.

FOR SALE—Paying florist business; large selected stock; good patronage, home and shipping; well located city south; will sell now or in July. Address G M J, care American Florist, Chicago.

FOR SALE—New house, 8 rooms, 6 acres land, orchard, small fruit, business (raise ornamental grasses), 4 blocks from depot. Lake Michigan in sight. Chicago can be reached in two hours. B, care American Florist.

FOR SALE OR TO LEASE—Cut flower plant containing 30,000 feet of glass in Chicago; in first-class condition, all modern conveniences. Stock in fine condition for the World's Fair year. Address A. T. JACKSON, Bowmanville P. O., Chicago.

FOR LEASE.

Two new greenhouses 100 feet long, containing 5,000 feet of glass, heated by steam, modern improvements, stock included; near a thriving town. Business established 8 years. Rent low to a good florist. For particulars, address

MRS. S. J. Nettlehouse, Adm'x, Waynesboro, Pa.

WANTED—A FOREMAN

Capable of taking charge of a large establishment where cut flowers are grown. Must have had great experience and be able to furnish best of references. Send full information, giving age, whether married, copies of references, etc. A good position and a good salary to the right man. Position ready any time before June 1. Address

Grower, care American Florist.

ROSES. ROSES.

◎—PLANTS FOR FLORISTS.—◎

BRIDESMAID, strong, 2½-inch pot plants.....$12.00 per 100

	Per 100	Per 1000
METEOR	$4 00	$35 00
CLOTHILDE SOUPERT	4 00	35 00
PERLE DES JARDINS	5 00	40 00
CATHERINE MERMET	4 00	35 00
THE BRIDE	4 00	35 00
MARIE GUILLOT	4 00	35 00
NIPHETOS	4 00	

	Per 100
MME. HOSTE	4 00
HERMOSA	4 00
SOUV. DE WOOTTON	4 00
PAPA GONTIER	4 00
MME. PIERRE GUILLOT	4 00
ETOILE DE LYON	4 00
MALMAISON	4 00

General Collection of TEAS, BOURBON and POLYANTHAS in 80 leading varieties, $4 per 100; $35 per 1000.

	Per 100
GERANIUMS, in fine assortment, per 1000 $35,	$4 00
CANNAS, large flowered, French, in 15 varieties	8 00
" large flowered French, in 8 scarce sorts	15 00
" Madam Crozy	15 00
" Tall growing varieties	4 00
DAHLIAS, a choice collection, strong roots	8 00

	Per 100
CALADIUM Esculentum, 7½ to 10 in. circum	7 00
" " 6 to 7½ in. circum	5 00
" " 5 to 6 in. circum	3 50
BEGONIA Rex, in 12 named sorts	5 00
" Vernon	8 00
CARNATIONS, Edna Craig and Grace Battles	12 00
POPPIES, Bracteatum and Royal Scarlet	8 00

Full assortment of Hardy Shrubs, Vines, Herbaceous Plants, Pæonies, etc. Large supply Hybrid Perpetual, Moss and Climbing Roses, field grown.

CATALOGUES AND PRICE LIST FREE.

THE STORRS & HARRISON CO.,

PAINESVILLE, Lake Co., OHIO.

WAR!

Powder and Shot at Rock Bottom Rates.

	Each.	Doz.
Bordeaux Mixture—20lb pkgs.	$1.00	$10.00
Copperdine—1 gallon cans.	1.50	15.00
Guicide Powder—25lb pkgs.	1.50	15.00
Kerosene Emulsion—6 gal. buckets.	1.25	12.50
Quassaine—1 qt. cans	1.00	10.00
" 1 gal. cans	1.50	15.00
" 2 gal. cans	2.50	25.00
Mildew Mixture—1 gal. cans	1.50	15.00
Carbolized Soap—1 gal. cans	1.00	10.00
Sulpho-Stealite Powder—25lb boxes.	2.00	20.00
Tobacco Dust—100lb bags	1.00	10.00
Tobacco Stems—Large bales	1.50	15.00
Tobacco Soaps—½lb pkgs.	.20	2.00
" " 1lb "	.40	4.00
Fir-Tree Oil—1 qt. cans	1.25	12.50
" " 1 gal. cans	3.50	35.00
Whale Oil Soap—1lb pkgs	.12	1.20
" " 5lb "	.50	5.00
" " 50lb boxes	3.50	35.00
Hellebore—1lb pkgs	.17	1.70
Pyrethrum Powder—½lb pkgs	.40	4.00
" " 1lb pkgs.	.75	7.50
Paris Green—1lb pkgs	.25	2.50
Slug Shot—5lb pkgs	.25	2.50
" " 10lb pkgs	.45	4.50
" " 235lb bbls	7.00	
Sulphur Powder—5lb pkgs	.40	4.00
" " 10lb pkgs	.70	7.00
" " 100lb bags	5.00	

GUNS.

Bellows (Houchin's)—Each 45c, 56c, 68c, 83c, 94c, $1.13 and $1.31.		
Fly Guns (small)—No. 979	$ .10	$ .90
Aphicides (Hughes) for spraying	.60	6 00
" (Hunt's)	.60	6 00
Fumigators (Tebbs) galv. iron No. 1	1.15	11.50
" " " No. 2	1.35	13.50
" " " No. 3	2.35	23.50
" " " No. 4	3.15	31.50
Spray Pump, Nixon's Little Climax	10.00	
Rubber Sprinklers (Scollay's), small	.42	4.20
" " large.	.80	8.00
Syringes, zinc, brass nozzle, 18 in.	.75	7.50
" brass, 3 nozzles, 14 in	2.10	21.00
" " " 16 in	3.00	30.00
" " " 18 in	4.25	42.50
Excelsior Force Pump	6.75	
Knapsack Sprayers..$12, $14 and $18.		
Atomizer Bellows $1.75.		

Above prices cancel all previous quotations. No Trade List. Orders by mail promptly filled f. o. b. Phila.

JOHN GARDINER & CO.,

SEEDSMEN,

PHILADELPHIA, PA.

World's Fair Notes.

The present attraction at the Fair is the cyclamen exhibit, the plants being displayed in the greenhouse formerly occupied by the primulas. These cyclamens have been very generously noticed in the daily papers under the name of "Persian violets," which has been suggested as a popular title for them, and the result is that they are drawing large numbers of visitors. So far the horticultural exhibit has been the only thing to be seen except the outside of the buildings, and there is no doubt that these flower displays have been a considerable source of revenue.

The cyclamens were in fine condition March 1, but had not been judged at that time. There were some superb specimens among them, particularly among whites; they will receive more detailed notice in the next issue of the FLORIST. It is likely that they would be judged by a single person, whose report must be ratified by a jury, as in the case of the primulas, and we are told that the chairman of the committee on awards desired to appoint a lady for this office. As soon as judged the cyclamens will be removed to the large building to make room for other plants. They are very much crowded for room in the greenhouses; so many young plants have to be brought on ready for the opening that it is quite an object to get these floral displays out of the way as soon as possible.

The next display will be of cinerarias. They are in very fine condition at time of writing, and, like the cyclamens, should be a valuable object lesson to the growers of market plants. The cinerarias are especially noticeable for their uniformly neat stocky growth, clothed with clean foliage right down to the pot. The cinerarias will be followed by the calceolarias, which are now coming on finely.

Some large pelargoniums are expected to make a fine show about the time of opening; they are sure to attract, being but rarely seen here. A good many showy flowering plants are being forwarded for that time, which with the pansy display should give plenty of bloom.

Mr. Thorpe is slowly recovering from his long illness, and is now able to be at the grounds every day.

SEND COPY early for advertisements in our special rose number to be issued March 30.

YOU CAN never invest $2 to better advantage than in a copy of our new trade directory and reference book.

THE AMERICAN FLORIST and *Gardening* together to one address for $1.75. Send orders to the American Florist Co.

Roses of Rare Excellence; strong 1 and 2-yr., outdoor grown, budded and own roots. Leading Nurserymen call them "best ever seen." Shall we express sample?

	100	1000
Climbing, 2-yr., 3 to 5 ft., own roots	$8	$70
" 1-yr., 2 to 3 ft., own roots.	7	60
Hyb. P., 2-yr., 2 to 4 ft., budded or own roots	9	85
" 1-yr., 1½ to 2 ft., " " "	8	75
Mad. Plantier, 2-yr., 2 to 4 ft., own roots	8	70
" " 1-yr., 1½ to 2 ft., own roots	7	60
Moss, 2-yr., 2 to 4 ft., budded or own roots.	9	85
" 1-yr., 1½ to 2 ft., budded or own roots	8	75

Evergreens, 2, 3 and 4 feet, fine. Full Stock Fruit Trees, Ornamentals—Everything! Stark Bros., Louisiana, Missouri.

1000 Choice Moss Roses for Sale.

Open ground, 3 to 4 feet, 2 years old, mixed varieties, $5.00 per 100. Would exchange for my selection of other roses.

H. H. SANFORD, FLORIST,
Box 274. Thomasville, Ga

ROOTED ROSE CUTTINGS

TESTIMONIALS

FROM NEW ENGLAND TO CALIFORNIA.

MASSACHUSETTS

Daniel W. Davis, of New Bedford, says:
"The cuttings reached me in splendid condition. I had no difficulty whatever with them after potting. They have proved first-class in every way, both as to growth and bloom. It is certainly the cheapest method of securing young plants for your greenhouses."

RHODE ISLAND.

S. J. Reuter, of Westerly, says:
"I had no more difficulty with them after potting than if taken out of the bench here. It is by all means the cheapest method of securing young plants for your greenhouses."

NEW YORK.

Thomas Mansfield, of Lockport, says:
"The rooted cuttings reached me in splendid condition and have done equal to our own. I believe them to be the cheapest and best."

OHIO.

Gravett & Son, of Lancaster, say:
"Cuttings arrived fresh and nice. They did well after being potted and have given excellent results in growth and bloom. It is the cheapest method of securing young plants."

ILLINOIS.

Pillsbury & Gessler, of Galesburg, say:
"Cuttings were well packed and reached us perfectly fresh. Will need some more cuttings this spring. Please send prices and varieties as soon as ready."

KANSAS.

R. G. Ferguson, of Parsons, says:
"They have given me as satisfactory results both as to growth and bloom, as if they had been taken from two and one-half inch pots. In spite of the dry season they did finely, more especially the Brides."

IOWA.

J. T. Temple, of Davenport, says:
"The cuttings arrived in good condition and well-rooted, and I only lost five out of one hundred and fifty. If they always do as well as those received this year from you, it is decidedly the cheapest method of stocking up with good paying plants."

PENNSYLVANIA.

Harry Chaapel, of Williamsport, says:
"The cuttings arrived in first-class condition. I had no more difficulty with them after potting than if they had been taken from our own bench, and they have given satisfactory results as to growth and bloom."

MARYLAND.

William Bester, of Hagerstown, says:
"The cuttings arrived in very fine condition, and they gave great satisfaction."

CALIFORNIA.

J. Bolrard, Posen Station, says:
"Cuttings arrived in very good condition and I had no difficulty with them after potting. They were very satisfactory as to growth and bloom, and I think it the cheapest method of securing young plants for your greenhouses."

Send for Catalogues and Prices with Half-Tone Pictures of the New Roses.

KAISERIN AUGUSTE VIKTORIA AND WHITE LA FRANCE.

C. STRAUSS & CO., ✳ WASHINGTON, D. C.

$80 Per 1000 **$10** Per 100 **$15** Per 100

This is the last chance to get a THOUSAND LOT of ROOTED CUTTINGS of the New Rose

BRIDESMAID

FROM HEADQUARTERS.

Express charges are very moderate on this class of plants, and the opportunity for thus conveying large quantities to distant points will soon be gone.

Rooted Cuttings.....per 1000, **$80.00**
Plants, from 2½-inch pots.....per 100, **10.00**
Plants, from 3½-inch pots.....per 100, **15.00**

The good quality of the stock sent out from the SUNNYWOODS GREENHOUSES can be relied upon.

FRANK L. MOORE, CHATHAM, NEW JERSEY.

PERLE ROSES.

ALSO BRIDES AND MERMETS.

No better stock in New York State. Orders solicited for April or May delivery, in 2½-inch pots; or in 4-inch pots June and July.

NIPHETOS, BON SILENE AND MME. HOSTE IN LIMITED QUANTITIES.

Salter Bros.,

42 W. Main Street, ROCHESTER, N. Y.

ROSES.

TEAS.....$30.00 per 1000
HYBRIDS.....40.00 per 1000
Healthy plants, in 2-inch pots.
Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.
Trade list on application.

Jacob Schulz,
LOUISVILLE KY.

YOU CAN save money by printing your spring trade list in our columns.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST.
ANCHORAGE ROSE CO., Anchorage, Ky.

PRINT your spring trade list in our special rose number, March 30.

Golden Returns.

200,000 ROSES 200,000

We offer well established, healthy plants in below named and many other sorts:

From 2-inch pots, $ 3.00 per 100; $30.00 per 1000
From 3-inch pots, 6.00 " 60.00 "
From 4-inch pots, 12.00 " 120.00 "
Not in excess of any one variety.

50,000 Hybrid Perpetual Roses 50,000

at $4 per 100; $40 per 1000, in 50 select varieties.

New and Rare Varieties at Special Rates given in our Wholesale List, now ready.

WE NAME A FEW SORTS ONLY:

Aurora, Bosanquet, Comt. de Labarthe, Bon Silene, Cels, Devoniensis, C. Mermet, Etoile de Lyon, Hermosa, Mme. Cusin, H. M. Stanley, Maimaison, Marie Guillot, Mme. Lambard, Marie Lambert, Marechal Niel, Kruger, Niphetos, Mme. Jos. Schwartz, Safrano, Perle des Jardins, Sombreuil, The Bride, etc., etc.

For anything in the Florist line, or send your lists to be priced. Address

NANZ & NEUNER,
LOUISVILLE, KY.

I WILL OFFER CHEAP
FOR NEXT 30 DAYS,

The following Roses, rooted in December, and as fine and healthy stock as any grower can send out.

SEND FOR PRICES.

Bridesmaids, **Richardias,**
Brides, **Amaryllis** of sorts,
Mermets, **Daybreak** carnations,
Perles, **Geraniums,**
Sunsets, **Smilax** and
Niphetos, **Florists' Seeds.**

Address **E. HIPPARD, Youngstown, O.**

HYBRID PERPETUAL ROSES.

We offer strong 2 yr. old H. P. and climbing roses, of the varieties named below at 9c. for H. P's and 6c. for climbers F. O. B. Newark, New York. This is extra fine stock grown for us on contract.

Alfred Colomb, Anna de Diesbach, Am. Beauty, Balt. Belle, Caroline DeSansal, Coquette Des Blanches Coquette Des Alps, Climbing Victor Verdier, Crested Moss, Climbing J. Margottin, Gen. Jack. Gen. Washington, Gem of Prairie, John Hopper, Jules Margottin, Mme. Plantier, Paul Neyron, Prince De Rohan, Persian Yellow, Queen of Prairie, Salet Moss.

L. L. MAY & CO.,
FLORISTS AND SEEDSMEN,
ST. PAUL, MINN.

Hybrid Perpetual Roses,

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.

Price Lists to applicants. Address

WILLIAM H. SPOONER,
JAMAICA PLAIN, (Boston), MASS.

FORCING ROSES

All the old, and such new varieties as have been proved, kept in stock.

M. A. HUNT,
TERRE HAUTE, IND.

HOLMEDALE GREENHOUSES,
MADISON, NEW JERSEY.

We are making a specialty of Beauties and Bridesmaids in 2½-inch pots. We will also fill orders for good, healthy stock of Brides, Mermets, Watteville and La France.

Ignorance is not Bliss!

In the florist business ignorance is not bliss. To keep in the front of the procession the florist needs all the information he can get. The more information he acquires the brighter are his prospects for success in his chosen field. It will be in order therefore to look into the merits of the new Rose

"American Belle."

if you have not already done so. It is a pink sport from "American Beauty" and a distinct gain in color. It has created a sensation wherever shown and will be a great seller next season. Plants from 2 1-2 inch pots will be ready April 15, '93. Price, $60 per hundred; $400 per thousand; (25 at hundred rate; 250 at thousand rate). Send in your order as early as possible, as the stock will be shipped strictly in rotation.

JOHN BURTON, Chestnut Hill, Phila.

MADAME CAROLINE TESTOUT.

The best rose of its color in existence. It has been fully tested in the New York market and

IT SELLS.

Healthy plants from 2½-inch pots now ready. Per 100, $25 00; per 1000, $200.00; 500 at 1000 rates.

ERNST ASMUS, West Hoboken, N. J.

ROSES.

FINE PLANTS and ROOTED CUTTINGS

AMERICAN BEAUTY,
LA FRANCE,
CATHERINE MERMET,
BENNETT,
BRIDE,
WOOTTON,
GONTIER.

METEOR,
PERLE DES JARDINS,
WATTEVILLE,
MME. CUSIN,
BRIDESMAID,
NIPHETOS,

Specially fine stock in the TWO MOST FASHIONABLE ROSES grown, METEOR and AMERICAN BEAUTY.

SEND FOR PRICES. **CHAS. F. EVANS & BRO.,** FRANKFORD, PHILADELPHIA, PA.
Mention American Florist.

ROSES Fine, Healthy, 2¼-inch Pots.

Perles, Brides, Mermets, Niphetos, Papa Gontier, Hoste, Watteville, Cusin, La France, Albany, Wootton, at . $5.00 per 100, $45.00 per 1,000.
Meteor at . . . . . $6.00 per 100, $55.00 per 1,000.
Climbing Perle, at . . . . . $10.00 per 100.

John Henderson Co.,
FLUSHING, N. Y.

ROSES. Clothilde Soupert. ROSES.

$6.00 PER 100.

Grand, healthy plants from 3-inch pots, are in splendid condition for Spring sales. We make this price to move them quickly. We want the room for Easter stock.

MERMET, NIPHETOS, BRIDE, GONTIER, WATTEVILLE and HOSTE, from 2-inch pots, $4.00 per hundred.

DAVID CLIFFE, Germantown, Phila., Pa.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

Catalogues Received.

Chas. T. Starr, Avondale, Pa., plants; Stark Bros., Louisiana, Mo., nursery stock; Harry Chaapel, Williamsport, Pa., plants and seeds; Sam'l C. Moon, Morrisville, Pa., nursery stock; Harlan P. Kelsey, Linville, N. C., native plants; Wm. H. Spooner, Jamaica Plain, Mass., roses; John N. May, Summit, N. J., roses, carnations and chrysanthemums; Schlegel & Fottler, Boston, Mass., seeds and plants; Max Deegen, Kostritz, Germany, plants; J. L. Dillon, Bloomsburg, Pa., trade list plants; L. J. Farmer, Pulaski, N. Y., small fruits; H. A. Dreer, Philadelphia, seeds and plants; Pitcher & Manda, Short Hills, N. J., chrysanthemums; Edw. Gillett, Southwick, Mass., plants and bulbs; Fred P. Burr & Co., Middletown, Conn., seeds; E. H. Hunt, Chicago, seeds and plants; H. G. Faust & Co. Philadelphia, seeds; S. B. Huested, Blauvelt, N. Y., nursery stock.

THE NEXT of our series of special numbers will be devoted to the rose, the "Queen of Flowers." It will be issued about March 30 and will take the place of our usual special spring number. We shall make this issue even handsomer than any of the special numbers yet issued and will spare no expense to make it worthy of the flower to which it will be mainly devoted.

IF YOU have not already ordered a copy of our directory and reference book you are missing a good thing that you ought to have. Remember that it contains not only a list of those in the trade but a vast amount of reference matter of great value to every reader of the FLORIST. The reference lists of roses, chrysanthemums and carnations are alone worth the price of the book.

WHEN writing our advertisers please use one of your printed business letter heads or enclose your business card.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

H. BAYERSDORFER & CO.,
WHOLESALE
FLORISTS' SUPPLIES ONLY,
60 N. 4th Street,
PHILADELPHIA, PA.
Our new Catalogue is now out, free upon application.

MARSCHUETZ & CO.,
FLORISTS' • SUPPLIES,
23 & 25 N. 4th St., PHILADELPHIA, PA.
Send for Catalogue.

Fancy. Dagger.
FIRST QUALITY HARDY CUT FERNS, $1.25 per 1000. In lots of 5000 and upwards, $1.00 per 1000.

2,000,000
HARDY EVERGREEN CUT FERNS,
Especially for Florists' Use.
SPECIAL ATTENTION PAID TO SUPPLYING THE WHOLESALE TRADE
L. B. BRAGUE, Hinsdale, Mass.

Asparagus Plumosus Nanus.
CUT STRINGS: 6 to 8 feet long, 50 cents each. 10 to 15 feet long, $1.00 each.
In large or small quantities all the year round. The largest stock in the country.
W. H. ELLIOTT, Brighton, Mass.

HARDY CUT FERNS?
Oh Yes, over
5,000,000.
I can supply you the year round with A1 goods. Also new Bouquet Green, Laurel festooning, etc.
H. E. HARTFORD,
18 Chapman Place, BOSTON, MASS.

THE SMILAX KING!
Who? Where? KOFFMAN, WALDEN, Orange Co., N. Y.
What? SMILAX
25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.
When? ALL THE YEAR AROUND.
And he pays the Express.

IF YOU NEED ANY
Cape Flowers, Immortelles, Grasses, plain or fancy Baskets, Metal Wreaths, Letters, Doves, or any other thing in the Florists' supply line, mail us your order.
REMEMBER WE ARE THE
Leading Manufacturers of Wheat Sheaves and Baskets, and Importers of Florists' Supplies.
Catalogue on application.
ERNEST KAUFMANN & CO.,
113 N. 4th Street, PHILADELPHIA, PA.

WHITE DOVES
FOR FLORISTS.
Largest and finest stock in the United States. Write for prices to
S. J. RUSSELL,
103 Van Winkle St., Jersey City, N. J.
AGENTS:
J. C. Vaughan, Chicago, Ill.
H. Bayersdorfer & Co., Phila., Pa.

When writing to any of the advertisers on this page please mention the American Florist.

THE
CHICAGO CUT FLOWER EXCHANGE
We still have some choice Advertising Space left in the Exchange.
The Headquarters of the Chicago Florist Club is now in the Exchange, which will still further enhance its value as an advertising medium.
SPACE TO RENT ON BLACKBOARD, BY THE WEEK OR MONTH.
Exhibitors making Chicago their Headquarters during the World's Fair, can obtain Desk Room at the Exchange at a reasonable rate.
FOR TERMS ADDRESS
The Chicago Cut Flower Exchange,
45 Lake Street, Chicago.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE
FLORIST,
1122 PINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STEET,
St. Louis, Mo.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

SMITH, The Florist,
GROWER OF
Fine Roses & other Cut Flowers
WHOLESALE AND RETAIL,
77 S. 7th Street, MINNEAPOLIS, MINN.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.

	Per 100
Perle, Gontier, Niphetos	$ 4.00
Mermets, La France, Bride, Wootton	6.00
Meteors	10.00
Carnations, short	1.00
" long	2.00
" " fancy	2.50
Romans, Valley, Narcissus, Tulips	5.00
Violets, Adiantum	1.00
Callas, Harrisii	10.00
Smilax	15.00

Above prices in effect till receipt of next issue of this paper.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
116 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.: Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange,
45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY & CO.
Wholesale and Commission
FLORISTS,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

WHOLESALE FLORISTS
La Roche & Stahl
N. E. CORNER
13th & Chestnut Sts.,
PHILADELPHIA.
Mention American Florist.

SAMUEL S. PENNOCK,
Wholesale Florist
REMOVED TO REAR OF 42 S. 16th ST.,
Philadelphia, Pa.

CUT SMILAX.
From Nov. 1st to May 1st our price for Smilax will be 20 cents per string. Quality first-class. Prompt attention to orders by wire.
J. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

Wholesale Markets.

Cut Flowers.

NEW YORK, Mar. 7.

Roses, Bon Silene, Gontiers	2.00@ 3.00
" Perles, Niphetos	2.00@ 4.00
" Mermet, Bride, Hoste	4.00@ 8.00
" Cusin, Watteville	4.00@ 8.00
" Bridesmaid, La France	6.00@10.00
" Meteor	8.00@15.00
" Jacqueminot	15.00@30.00
" Beauty	25.00@75.00
" Hybrids	25.00@40.00
Carnations	.75@ 1.00
Valley, hyacinths, tulips	2.00
Daffodils	2.50@ 3.50
Harrisii	3.00@ 8.00
Violets	.50@ 1.25
Cattleyas	25.00@50.00
Mignonette	2.00@ 8.00
Smilax	15.00@25.00
Adiantums	1.00
Lilac (bunch)	1.00@ 1.25

BOSTON, Mar. 7.

Roses, Niphetos, Gontier	4.00@ 6.00
" Perle, Sunset Wootton	6.00@ 8.00
" Bride, Mermet	6.00@12.00
" Meteor	12.00@15.00
" Beauty, Hybrids	25.00@50.00
" Jacqs	16 00@25.00
Carnations	1.00@ 2.00
Valley	1.00@ 3.00
Acacia	25.00
Heath bunch	.75
English primroses "	.12
Hyacinths, narcissus, Paper White	1.00@ 2.00
Daffodils, tulips	1.00@ 3.00
Violets	.50@ .75
Mignonette	1.00@ 5.00
Callas, Harrisii	8.00@10.00
Pansies	.75
Freesia	1.00@ 2.00
Smilax	17.00
Adiantum	1.00@ 2.00
Asparagus	50.00

PHILADELPHIA, Mar. 7.

Roses, Perle, Gontier, Niphetos	4.00
" Mermet, Bride, Albany	8.00
" La France	8.00@10.00
" Hoste, Casin, Watteville	4.00@ 6.00
" Bennett, Wootton, Guillot	6.00@ 8.00
" Meteor	8.00@10.00
" Beauties	25.00@40.00
" American Belle	40.00@50.00
" Brunners	40.00@50.00
" Laing, Magna Charta	25.00@40.00
Carnations	1.00@ 1.50
Mignonette	1.00@ 2.50
Violets	.50@ 1.00
Valley	2.00@ 3.00
Daffodils	4.00
Tulips	4.00@ 5.00
Freesia	1.00@ 1.50
Callas, Harrisii	8.00@10.00
Adiantum	1.00@ 1.50
Asparagus	50.00@75.00
Smilax	15.00@20.00

CHICAGO, Mar. 7.

Roses, Perles, Niphetos Gontier	3.00@ 4.00
" Mermet, La France, Albany	4.00@ 6.00
" Bride, Wootton, Bennett	5.00@ 6 00
" Beauty	12.00@20.00
" Jacqs	15.00@18.00
" Hybrids	25.00
Carnations (short)	1.00
" (long)	1.50@ 2.00
" (fancy)	2.00@ 3.00
Callas, Harrisii	10.00@12.00
Romans Valley	3.00@ 4.00
Violets	.75@ 1.00
Daffodils	3.00@ 4.00
Tulips	3.00@ 4.00
Freesia	2.00@ 3.00
Marguerites	.00@ 1.00
Mignonette	2.00
Smilax	15.00@18.00

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

WHOLESALE FLORISTS,
JOBBERS IN . . .
. . FLORISTS' SUPPLIES,
FLORISTS' VASES.
METS,
BRIDES,
GONTIERS,
CARNATIONS,
ALWAYS ON HAND.
1 Music Hall Place,
BOSTON, MASS.
HORTICULTURAL AUCTIONEERS. . .
W. F. McCarthy & Co.

Mention the American Florist when writing to advertisers on this page.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN
AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY,
Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
The finest Roses, Violets and Carnations
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

HENRY W. BAYLIS,
Wholesale Florist
940 BROADWAY,
. . . . NEW YORK.

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., BOSTON, MASS.

The Seed Trade.

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1893. Applications for membership should be addressed to Wm. Meggatt, chairman membership committee, Wethersfield Conn.

What the Boys are Doing.

Wholesale onion prices seem to be weaker in spots, the severe weather having kept gardening operations back, some rather large holders of onion seed are evidently anxiously reading their mail for more and larger orders, and are not willing to linger in uncertainty till the last day awaiting former prices, but prefer rather to stimulate immediate demand by a cut. A long felt want for a prophet on the future of onion seed remains unfilled. The following letter explains itself:

———, —, March 2d, 1893.

On February 25th we sent out five telegrams in relation to Red Wethersfield onion seed, asking prices for 250 pounds, and we received answers from all of them the same day. One firm in the east quoted us extra stock, high test, at 95c., another $1. One Chicago firm at $1.15, another one $1.25, and —— at $1.35. We accepted the 95c. deal and increased the order to 350 pounds, terms June 1st net, F. O. B. our city, and in conclusion would say that this firm is considered by seedsmen as very reliable, and our experience so far has proven what others have said about them. They offer to furnish us the seeds as long as they have a supply at same price, viz., 95c. with guaranteed vitality, crop of 1892. ——— ———.

CELERY FOR PROFIT is the title of a neat book of 85 pages published by W. Atlee Burpee & Co.; it is written by T. Griener, and contains very full accounts of modern methods in growing and marketing celery.

S. F. LEONARD left for Florida on the 6th inst. Ill health caused partly by overwork is the cause of such a step at this season of the year.

ERNST BENARY, Erfurt, Germany, one of the most prominent seedsmen in Europe, died February 19, age 74. His body was cremated in Gotha.

URIA DARE, the seed grower, died at Pierrepont Manor, N. Y., March 6, of pleuro-pneumonia, aged 64 years. He was on his way home from visiting his customers when taken sick February 28.

The Nurserymen.

The American Association of Nurserymen, which will hold its annual convention in Chicago June 7 next, will not present any regular program in advance of the meeting as has been the usual custom in the past, but will prepare a list of essays and let the members themselves arrange the program and decide upon the number of sessions after assembling on the opening day. The attendance at the Chicago meeting promises to be unusually large.

PRINT your spring trade list on this page. It will be not only more effective but cheaper than a list printed and mailed by yourself.

DO YOU WANT a list of the leading park superintendents of America? You will find such a list in our new trade directory and reference book.

EVERY FLORIST SHOULD TRY

VICK'S NEW WHITE BRANCHING ASTER

THE FLORISTS FAVORITE

Strong Grower. Long Stems.

Flowers 4 in and over in diameter.

Petals broad, long, twisted and curled.

In bloom after all other varieties are done flowering.

PURE WHITE.

Our local florists who saw them in bloom last summer, say:

"Saw the Aster in bloom in fall and know they were fine." F. J. KELLER.

"Please send us 8 packets of the New White Branching Aster, we saw on your trial grounds last summer. Think it the finest Aster for florists' use without any exception we have ever seen." SALTER BROS.

We have the pleasure of introducing to flower lovers a variety of Aster having some peculiar and very valuable characteristics. The plant is a strong grower, and its tendency to form numerous branches is very marked. The plant continues to grow *later in the season than any other variety* with which we are acquainted, and blooms correspondingly late, thus giving its crop of flowers in late autumn, a season when there is always a scarcity of bloom.

The flowers are borne on very long stems and are pure white, being *four inches and more in diameter.* The petals are broad, long, and many of them more or less twisted and curled in such a manner as to give the blooms the appearance of large, loose and graceful Chrysanthemums. The resemblance is so great that nearly everyone would so consider them when seen as cut flowers.

All florists who have seen them greatly admire them, and there is no question that they will quickly find a place for themselves in the flower trade, anticipating, as they do, the Chrysanthemum season by a month or six weeks. *Price, per packet, 25 cents.*

If you have not seen a copy of Vick's Floral Guide for 1893—The Poet's Number—send for a copy to-day, and read about the new novelties.

JAMES VICK'S SONS, 541 East Ave. **Rochester, N. Y.**

Mention American Florist.

New Chrysanthemums.

40 VARIETIES INTRODUCED IN 1892.

Twelve Plants for One Dollar.

Now ready for delivery. Send for Catalogue.

M. B. LITTLE, Glens Falls, N. Y.

Mention American Florist.

COLEUS AND GERANIUMS

Cuttings and potted plants. Wholesale and Retail. . . . .

CHAS. A. BAIRD, Manalapan, Mon. Co., N. J.

CATALOGUE PRINTING. ELECTROTYPING.

Done with expert ability for Florists, Nurserymen, Seedsmen. Write to

J. Horace McFarland Co., HARRISBURG, PA.

SEND FOR A COPY OF OUR TRADE DIRECTORY

AMERICAN FLORIST CO., CHICAGO.

BEST GERMAN FORCING PIPS

Price: $9 the 1000,
$20 the box of 2500,
Less ten per cent. for prompt cash.

August Rölker & Sons
New York, P. O. Station E.

HULSEBOSCH BROS.,
BULB AND PLANT GROWERS,
OVERVEEN, near Haarlem, HOLLAND.

Prices on application for the coming season of

ROMAN HYACINTHS,	PAPER WHITE NARCISSUS,
LILY of the VALLEY,	HARRISII LILIES,
LIL. LONGIFLORUM,	TULIPS,
DUTCH HYACINTHS,	CROCUS,
SPIRAEAS,	ROSES, ETC., ETC.

☞ Spring Catalogue now ready. ADDRESS

A. HULSEBOSCH,
P. O. Box 3118. Warehouse 58 West Street,
NEW YORK CITY.

Send for Catalogue of
JAPAN BULBS, SEEDS, AND SHRUBS.
ARAUCARIAS,
AUSTRALIAN Palm Seeds,
CALIFORNIA BULBS AND SEEDS to
H. H. BERGER & CO.
ESTABLISHED 1878. SAN FRANCISCO, CAL.

G. J. MOFFATT,
Manufacturer of
PAPER BAGS AND ENVELOPES
Special attention given to
Seed Bags and Catalogue Envelopes.
NEW HAVEN, CONN.

TUBEROSES.

☞ We are headquarters.	Per 100.	Per 1,000
1st size Dwarf Pearl	$1 50	$12 00
2d size "	80	6 50
1st size Tall Pearl	1 20	10 00
Gladioli, extra large, finest sorts	1 25	12 00

H. G. FAUST & CO.,
64 and 66 N. Front St., PHILADELPHIA, PA.
WOODLAWN FARMS, 1,500 ACRES.

Are You a Fruit or Flower Raiser? For Market or Pleasure—

If so, send for our Circular on Fungicides and Insecticides, which are **cheap** and **reliable**. Agents in every State. **Special Fertilizers** for Fruits, Flowers and Vegetables. Agricultural Chemicals. **W. S. POWELL & CO.,**
Chemical Fertilizer Manufrs, Baltimore, Md.
S. F. LEONARD, Seedsman, Agent, Chicago, Ill.

When writing to any of the advertisers on this page please mention the American Florist.

WE SELL SEEDS
TO FLORISTS AND DEALERS.

WEEBER & DON,
SEED MERCHANTS AND GROWERS,
114 Chambers St., New York.
Catalogues on Application.

Write for wholesale list.
MICHEL PLANT AND BULB CO.,
ST. LOUIS, MO.

BENJAMIN RIMBAUD, BULB GROWER,
Quartier du Temple, Toulon, var, France.
Cable address Benrimband, Toulon.

The largest cultures in the South of France, of **WHITE ROMAN HYACINTHS**, Narcissus Paper White grandiflora, N. Double Roman, N. Double Von Sion, true pure yellow, and other Daffodils. **Lilium Candidum**, the largest bulbs. Freesias, Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A. Double Rosette the earliest, etc. Prices on application.

C. H. JOOSTEN,
3 COENTIES SLIP, NEW YORK,
IMPORTER OF
PLANTS, BULBS & FOSTITE.
Catalogue of Plants and Book on Fostite sent on application.

MEECH'S TUBEROUS BEGONIAS.
The Finest Strain in Existence.
For Prices see American Florist for January 26th, 1893.
SEED ALL SOLD.
Catalogue about March 15th.
F. J. MEECH & SON,
Charlevoix, Mich.

—MORE THAN—
1,000,000 TREES
Fruit and Ornamental, SHRUBS, VINES, ROSES, etc., in over **1,000 Varieties.**
New and Rare. Old & Reliable. | Send for our Illus. Catalogues.
W. S. LITTLE & CO. ROCHESTER, N. Y. or 15 E. 11th St. N. Y. City

---

SPHAGNUM MOSS. CLEAN, DRY, FINE.
1 Bale $1.25; 3 Bales $3.50;
10 Bales $10.00.
JOHN A. SALZER SEED CO., La Crosse, Wis.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

The Snow Crest Daisy fills the bill;
Test it any way you will;
However you must grow it cold;
Then its mammoth size will hold.

Every florist should invest
In this Daisy; 'tis the best;
For design work so complete
There's really nothing quite so neat.

CUT BLOOMS, $1 PER 100, POST FREE.

Large stock fine plants all in bud and blooming, 15 for $1.00; 100 for $5.00; sample plant and bloom for 12c. Double fringed petunias, Dreer's, mixed, all colors, stock plants, 3-inch, strong, 60c. per doz.; $4 per 100; smaller from flats, $2.50 per 100; rooted cuttings, $1.10, post free. The florist double white forcing Petunia, white as the driven snow, fringed and delicately scented, valuable for cutting, design work, etc., stock plants, $1 per doz.; from flats, $3 a 100; rooted cuttings, $1.50 per 100. Double Golden Marguerites, the genuine dwarf, large flowered, stock plants, 60c. per doz., $4 per 100; smaller from flats, $2 per 100; rooted cuttings, $1.10, post free. Double Dahlia Sunflower (Helianthus multiflorus), rooted pips ready for potting, 50c. per doz., $2.50 per 100. French Cannas, Fairmount Park strain, reds in variety, dry roots ready for potting, 50c. per doz., $3 per 100; large flowered yellow, mixed, plain blotched, striped; these are extra fine showy kinds 60c. per doz. $4 per 100; a few extra fine bronze-leaved kinds, 60c. per doz. Variegated Vincas, field-grown, 3-inch, $5 per 100; small from flats, $2 per 100. Coleus, Fuchsia, Stevia, Alyssum, double and single, Gem, Feverfew and miscellaneous rooted cuttings, $1 per 100, small pits, $2 per 100. Rooted cuttings per 100 and small plants per doz. post free if desired. Safe arrival and satisfaction guaranteed or money refunded.

Address **J. C. GIBSON, Woodbury, N. J.**

Received March Importation of MUSHROOM SPAWN.
Per lb. 15 cts.; 10 lbs. for $1.20; 100 lbs. $8.00.
W. W. BARNARD & CO.,
Office: 6 & 8 N. Clark St., Warehouse: 186 Kinzie St., CHICAGO.

ONE MILLION
Trees, Shrubs, Decorative Herbaceous Plants, etc. for landscape gardeners, parks, cemeteries and private gardens.
Catalogues free. Prices low. . . .
B. M. WATSON,
Old Colony Nurseries, PLYMOUTH, MASS.

FICUS ELASTICA.
$5.00, $6.00 and $9.00 per dozen.
JOHN BURTON,
Chestnut Hill, Philadelphia, Pa.

E. G. HILL & CO.,
Wholesale Florists,
RICHMOND, INDIANA.

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

Montreal.

The Gardeners' and Florists' Club of this city is already in the field with their advance premium sheet for their annual chrysanthemum exhibition. The prize list is more elaborate and comprehensive than last season and due consideration has been made for effect and arrangement so as to give the exhibition greater interest from the spectator's standpoint. The arrangement of groups of chrysanthemums with foliage plants, according to the taste of the exhibitor, cannot but be a more interesting feature for the onlooker, and one of importance to the progressive and artistic exhibitor. It is one thing growing good specimens of any particular plant and another thing in knowing how to display them to advantage. No florist or private gardener can be considered well up in his business who cannot do both.

The list of essays to be read before the club in 1893-94 is as follows, and contains nearly everything worth knowing from a gardener's standpoint:

1893.
March 14.—Cannas and mushrooms.
April 11.—Bedding plants and Aurora Borealis.
May 9.—Progress of floriculture, and arrangement of cut flowers.
June 13.—Forcing strawberries, and forcing grapes.
July 11.—Retail florists' hardships, and rose planting.
August 8.—Market supply of vegetables, and composts.
Sept. 12.—Outdoor grapes, and cyclamen.
Oct. 10.—Storing fruit, and hybridization.
Nov. 14.—Propagation in general.
Dec. 12. Insects and how to fight them.

1894.
Jan. 9.—Orchid culture.
Feb. 13.—Chrysanthemums and ferns.

The annual drive and social takes place on March 10, when the members and their friends take a sleigh drive around Mount Royal and end with a social and dance in the hall of their club rooms on University street.

The flower trade in this city is reported active, but flowers scarce, especially roses. There is abundance of narcissus and hyacinths, however. W. G.

OUR special rose number will be issued March 30. It will be an advance on all our former special numbers and will go to every live florist in America. Send in your advertisements early. No increase in rates.

TUBEROUS BEGONIAS.

Griffin's unequalled strain. The only Begonias offered that are grown out doors in America. Two first-class certificates at the last meeting of the Society of American Florists. Descriptive list free.

$6.00 per 100, $50.00 per 1,000 for first quality, large tubers, in separate colors.

This quality is better than Imported Tubers at the highest prices.

J. WILKINSON ELLIOTT,
PITTSBURG, PA.

Look Here!

10,000 PEACH TREES, leading kinds, largely Globe and Crawford's Late.

5,000 IRISH JUNIPER, fine, 1 to 5 ft.

Siberian and American Arbor Vitæ, in car load lots, large enouge to make screens as soon as planted. Prices given on application. I am in the market to sell.

W. P. BRINTON, Christiana, Pa.

ROOTED CUTTINGS.

SEND FOR LIST.

CARNATIONS.

GOOD STOCK. GOOD CUTTINGS. GOOD VARIETIES.

FRENCH CANNAS.

Standard sorts; good roots; nothing cheap but the price, $4.50 per 100; $36 per 1000.

AZALEA VERVÆNIANA.

The prettiest one that grows. Good sized small plants at $10.00 per 100. Correspondence solicited. Inspection invited.

L. B. 496. ALBERT M. HERR, LANCASTER, PA.

While we're Waiting

For "Thorpe's Ideal"—and it's coming—let us use the best

Carnations

obtainable. We have them; good, clean, free from "rust", and well rooted—the best varieties now in the market. Our stock of

Coleus

also includes the best sorts for bedding and fancy use. We're sold ahead till April 1 on these, but place your orders at once if you want them early. Send for our Trade List.

ALEX. McBRIDE,
ALPLAUS, N. Y.

GRACE BATTLES
and over 60 other varieties of
CARNATIONS
offered the Wholesale Trade.

My list embraces the best Standard and New kinds, including some of particular interest to growers of seedlings. Correspondence and personal inspection solicited. C. J. PENNOCK,
The Pines, Kennett Square, Chester Co., Pa.

CARNATIONS
ROOTED CUTTINGS NOW READY.

Lizzie McGowan, Garfield, Hinze's White, Silver Spray, Portia, Mrs. Fisher, Wm. Swayne, and Pres. DeGraw, at $1.00 per 100; or $9.00 per 1000.

Tidal Wave, Ferdinand Mangold, White Dove, Nellie Lewis, Mrs. F. Mangold, Fred Creighton, J. J. Harrison and Hector, at $1.50 per 100; or $14.00 per 1000. Cash to accompany all orders.

E. B. LEWIS, Lockport, N. Y.

VIOLETS.
"LADY H. CAMPBELL."

Well rooted young plants, delivery May 1st, at $5.00 per hundred.

From sand, as soon as rooted, $3 per hundred. Stock free from disease. List of other varieties of violets on application.

H. HEUBNER, Violet Grower,
GROTON, MASS.

Tuberous Begonias.

Seedlings, Double, mixed colors; Single, mixed and separate colors, by mail, per 100, $3.00. A different strain of Single mixed, $2.50.

Ready in April. Order now. Please don't wait until end of May; we don't want to keep them that long; and they cannot be sent so safely that late if the weather be warm.

BRAUER & RICHTER, McConnellsville, O.

10,000 Nymphæa Odorata or White Water Lily Roots
FOR SALE.

Price, $5.00 per 100; $40.00 per 1000; or will exchange for seeds, plants or bulbs. For further particulars ADDRESS B. L. CLARK, Randolph, Mass.

Always mention the American Florist when writing to advertisers.

TWO NEW
Scarlet Carnations.

No. 93 (90) is of the brightest scarlet imaginable; large flower, strong stem. Calyx never bursts.

No. 118 (30) of the same qualities as the above, only more dwarf in growth and the flower is a little smaller.

These varieties are a great improvement on Portia and Garfield—the parents of both. The only thing objectionable is their lateness of blooming, commencing about the 1st of March. But they are admirably adapted for Easter flowering, either as pot plants or to cut from the bench, as the bulk of the crop will come in at that time.

Price for Rooted Cuttings, $10 per 100; $75 per 1000. Stock limited.

Mr. R. Craig being the first purchaser of these varieties, has the privilege to name them.

FRED. DORNER & SON, LaFayette, Ind.

Mention American Florist.

ORANGE BLOSSOM
CARNATION.

One of the leading new varieties, and an immense bloomer; received a Certificate of Merit in 1891; color Pink, Edged White.

Rooted Cuttings, $3.00 per 100; $25.00 per 1000.

MAY FLOWER, splendid variegated, $2.50 per 100.
THE JENNINGS STRAIN OF PANSIES, trade packet, 2000 seeds, $1.00. Fine, stocky plants, small, 60c. per 100 by mail; $5.00 per 1000 by express.

E. B. JENNINGS,
Lock Box 254. SOUTHPORT, CONN.

Rooted Cuttings, Carnations,

Lizzie McGowan, $20.00, Grace Wilder, $12.50, Silver Spray, $15.00, and Hinze's White, $12.50 for one thousand of each.

COLEUS, $8.00 for one hundred. Fuchsias (choice varieties) $5.00 for one hundred.

GERANIUMS, Gloire de France (new French importation) $30.00 for one thousand.

A. J. VREELAND,
JERSEY CITY, N. J.

ROOTED CUTTINGS
Of the Best Old and Most Promising new varieties of
CARNATIONS.
Write for a catalogue and send list of wants for an estimate.

J. J. Styer,
CONCORDVILLE, PA.

ROOTED CARNATION CUTTINGS.
NOW READY.

Of the best old and new varieties now in cultivation, in small or large quantities. Send for estimate of wants or price list.

ISAAC LARKIN, Toughkenamon, Pa.

	Per 100	Per 1000
CARNATIONS, standard varieties	$1 00	$9 00
NEWER KINDS	$1.50 to 2 00	
COLEUS	75	6 00

Send for prices on Chrysanthemums, Alternanthera, Snow Crest Daisy, etc.

JOHN J. CONNELLY, Bryn Mawr, Pa.

Rooted Cuttings.

Carnations Hinze's White, Mrs. Fisher, Silver Spray, Jeannette, Grace Wilder, Fred Creighton, Mayflower, Century, Anna Webb, $1.50 per 100; $10 per 1000.

Orange Blossom, Portia, Hector, Florence, American Flag, $2 per 100; $15 per 1000.

Coleus, leading varieties, including the finest Yellow Coleus in cultivation. A new variety equal to Golden Bedder in color, and as good a grower as C. Verschaffeltii, $1.00 per 100; $8.00 per 1000.

Double Petunias in four finest varieties, $2.00 per 100.

Fuchsias, finest named varieties, $1.50 per 100.

Heliotrope $1.00 per 100.

Ageratum, Dwarf, White and Blue, $1.00 per 100.

500 at 1000 rates. Cash with order. 10 cents per 100 extra when shipped by mail.

JAMES HORAN, Florist,
BRIDGEPORT CONN.

CARNATIONS

ROOTED CUTTINGS.

Puritan, Aurora, Golden Triumph, Grace Darling, Daybreak, Pearl, White Wings, Lizzie McGowan, Louise Porsch, W. F. Dreer, J. R. Freeman,

and many other varieties; fine, healthy stock, ready January and after.

HYBRID PERPETUAL ROSES

500 Paul Neyron, strong plants....$10.00 per 100.
20 other leading varieties ....$10.00 per 100.
$80.00 per 1000.

☞ Send for price list.

WOOD BROTHERS,
Fishkill, N. Y.

W. R. SHELMIRE,
Carnation Grower

AVONDALE, CHESTER CO., PA.

Send for price list of **Rooted Cuttings.**

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

ROOTED CUTTINGS OF

CARNATIONS

All the leading varieties.
Fine stock Buttercup.

CHAS. T. STARR, Avondale, Chester Co., Pa.

CARNATIONS

ROOTED CUTTINGS.

Send for Price List of all the leading varieties.

WM. SWAYNE,
P. O Box 226. KENNETT SQUARE, Chester Co., Pa.

THE NEW WHITE CARNATION

GOV. RUSSELL

A SEEDLING OF 1888.

NOW READY FOR DISTRIBUTION.

Price of Rooted Cuttings: Per 1000, $80; 500 at 1000 rate; per 100, $10; 25 or less, $2 per doz.

ORDERS WILL BE FILLED STRICTLY IN ROTATION.

FOR SALE BY

N. F. McCARTHY & CO., 1 Music Hall Place, Boston, Mass.
C. J. PENNOCK, Kennett Square, Pa.
and E. H. HUNT, 79 Lake Street, Chicago.

PLANTS CAN BE SEEN AT THE ESTABLISHMENTS OF ANY OF THE ABOVE NAMED.

The Following Testimonials tell the Story:

SOUTH SUDBURY, MASS.—The new Carnation, Governor Russell, I consider a grand acquisition to the pink family. It is a pure white with a large flower on a long stiff stem. It is a beautiful shaped plant, and does finely as a pot plant. It does not burst its Calyx, and this is one of the main things in the keeping qualities of a Carnation. It is a great keeper and easy propagator, free bloomer and free from disease. JAS. TULIS.

MR. N. F. McCARTHY, Boston. DEAR SIR:—I am pleased to state that after an examination of nearly 1,000 plants of Gov. Russell Carnation I can endorse all that has been said in favor of it. While not the Ideal Carnation, yet I can rank it with the best in cultivation now as regard qualities requisite for a profitable florist flower. As large sized flower as Lizzie McGowan, but of better form and substance, calyx not splitting, a very free bloomer, and plants of a remarkably healthy constitution, more so, in fact, than most of the Carnations in cultivation now. Very respectfully yours, DENYS ZIRNGIEBEL.

MESSRS. N. F. McCARTHY & CO. GENTLEMEN:—Your favor of the 5th inst., asking my opinion of the Carnation Gov. Russell, is received. I have seen this Carnation at Reading three times, June, in September and December of the past year. In early June the old plants were a mass of buds and flowers, exceeding anything I had ever seen; the young plants were in field and looked well; in September the plants were being lifted and placed in greenhouses, and had been very severely pinched back—too severely for their good; in December there was a moderate amount of buds and bloom—the plants not having recovered from the heavy topping in early fall. My conclusion is, that one of its parents was Hinze's White, that it is inclined to be late if pinched back more than once in the season, that it is a strong, healthy plant, with robust constitution; the flower is from medium to large, of the Lizzie McGowan type, yet somewhat better in form; it does not burst its calyx, and has a fairly stiff stem. I observed that the lateral flowers were as large as terminals—a very high quality. I have given my opinion, based solely on what I saw the three visits made to Mr. Cumming's place at the times stated.
Yours truly, R. T. LOMBARD.

Orders Booked Now for My Specialties

FOR 1893.

New Jersey.—A scarlet Carnation hard to beat.....$12.00 per 100

Old Rose.—Old rose pink Carnation. .....$12.00 per 100

Nellie Bowden.—Pure bright yellow Canna.....$60.00 per 100

READY IN FEBRUARY.

Other varieties of Carnations, both old and new

JOHN McGOWAN,
• • • • • • ORANGE, N. J.

SEE OUR PRICE LIST

in special carnation number of Jan. 19th, or address

EDW. SWAYNE, Carnationist,
. . . Kennett Square, Pa.

Rooted Carnation Cuttings.

WHOLESALE PRICE LIST NOW READY,

Containing a full list of best new and old sorts, including the Prize takers at MADISON SQUARE and PHILADELPHIA.

Address **H. E. CHITTY, Paterson, N. J.**

ROOTED CUTTINGS of CARNATIONS
By the Wholesale.

Ready now. This is the best time for intending buyers to supply themselves. offer them at moderate prices. Send for Price List. Address

JOSEPH RENARD, Unionville, Chester Co., Pa.

Carnation Cuttings.

Healthy stock, well rooted, ready to ship now.

Hinze's White	per 100, $1.25;	per 1000,	$10.00
Grace Wilder	" 1.50;	"	12.50
Portia	" 1.50;	"	12.50
Anna Webb	" 2.00;	"	15.00
Lizzie McGowan	" 2.00;	"	15.00
W. F. Dreer	" 2.50;		

THOMAS DeWITT,
(Successor to DeWitt Bros.) **BRISTOL, PA.**

CARNATIONS ❋ AHEAD.

You want the best in the market! We have them, 16 Novelties of '93, and all the STANDARD VARIETIES! Send for our complete Price List.

GEORGE HANCOCK, Grand Haven, Mich.

Ottawa, Canada.

The Ottawa Florists' and Gardeners' Club held their third annual banquet in the Silver Gridiron restaurant on the evening of Wednesday, February 22. The dinner was one of the happiest and most enjoyable held by the club.

Mr. H. F. Sims, the energetic president of the club, occupied the chair and over 50 members and friends sat down, among whom were many leading citizens and parliamentarians. A lengthy and highly entertaining toast list of rhetoric and music displayed the versatility of the members, while the strains of a special orchestra added additional charms to an already charming scene, the beautiful dining room being profusely and superbly decorated.

Among the toasts were the customary loyal and patriotic sentiments followed by "Canada our Home," responded to by Messrs. A. S. Woodburn and James Hickey; "Our Horticultural Interests," by Col. White and Messrs. Sorley, Carry and Elmett; "Success to the Central Canada Fair Exhibition," replied to by Messrs. A. Geddes and James Hickey. "Our guests" brought a response from ex-Alderman Borthwich, and "Our Club" was attended to by the president, treasurer, secretary, James Hickey, A. Pegg, A. Hickey, T. J. Benbow and J. Mulloch. The press and the ladies were also acknowledged. The enjoyment of the evening was much enhanced by the singing of Messrs. George Taylor, Benbow, Robb, A. Hickey and others.

Ex-Ald. Borthwich, the well known fruit grower of the Ottawa Valley, has issued an invitation to the members of the Gardeners' and Florists' Club of Ottawa to visit and inspect his extensive fruit farm on the first favorable opportunity during the coming season. The invitation was accepted and the genial alderman thanked for his kindness.

Next winter it is the intention of the Ottawa gardeners and florists to give a grand reception and ball instead of the usual supper.

A leading member of the government intends to offer a special prize for competition at the next Central Canada Fair Association show. M.

PREPARE your advertisements now for our special rose number to be issued March 30. We must have copy by March 23, at the latest and as much earlier as possible.

PLANTS. FLOWERS.

Mendenhall, the Pioneer Florist of the Northwest, always to the front with the finest, healthiest, cleanest stock of Roses, Carnations, Smilax and all kinds of Bedding plants to be found. Prices low. Send for catalogue. Cut flowers at wholesale and retail. The pure air of Minnesota is good for man, beast and plants, and Minneapolis is the place, and Mendenhall Greenhouses is the name to address for anything good in the florist line.

MENDENHALL GREENHOUSES,
MINNEAPOLIS, MINN.

ROOTED CUTTINGS
GOOD ONES.

Verbenas, 22 varieties	per 100,	$ .90
Coleus, 12 varieties	"	1.00
Chrysanthemums, 40 varieties	per doz.	.20
Fuchsias, 10 varieties	"	.20
Heliotrope, 4 varieties	"	.20
Double Alyssum	"	.20
Cigar Plant	"	.20
Manettia Vine and Mexican Primrose	"	.25

I. L. PILLSBURY, Macomb, Ill.

The three leading Florist Flowers:

CHRYSANTHEMUMS, CARNATIONS AND ROSES.

ALL THE NEW AND SELECTED STANDARD VARIETIES. . . .

My stock of all are as fine as can be produced at reasonable rates.
Complete list of these will be mailed to all applicants in the trade.

JOHN N. MAY, Summit, N. J.
Mention American Florist.

CYCAS REVOLUTA.

The largest and BEST selected stock of Cycas Revoluta (fronds and roots cut off, TRUE, long leaved variety) now on hand. CYCAS CIRCINALIS delivered from April 1st.

Lilium Auratum, Lilium Spec. Album, Lilium Spec. Rubrum, Nerine Japonica, Lilium Krameri, etc., in great quantities, imported for spring trade.

Price on application.

F. GONZALEZ & CO.,
303-312 WAYNE STREET, CRESCENT AVE.,
SAN FRANCISCO, CAL.

N. B. Fresh Cycas leaves for sale by the thousand.

ROZY ANNAS.

WE ARE HEADQUARTERS . . for all the Novelties, and in addition control *EXCLUSIVELY* several grand varieties which we now offer for the *first time*. We will not be undersold on any of the list.

J. C. VAUGHAN,
New York: CHICAGO.
26 Barclay Street. P. O. Box 688.

Greenhouses: Western Springs. . . .

FOR SALE.

Alternantheras Paronychioides Major, Rosea.

NEW strong plants of above at $3.00 per 100, 200 for $5.00, per 1000 $20.00.

Extra strong rooted cuttings of **Aurea Nana** 50c. per 100, by mail 60c. On account of room this could not be potted, all from September grown cuttings.

Finest fringed, ruffled flowered double **Petunia**; strong, 2-inch pots, $3.00 per 100; 200 for $5.00. Rooted cuttings of same, $1.50 per 100, free by mail; cash with order. Will book orders for **Achillea, the Pearl**, at $1.00 per 100, free by mail, ready for delivery about March 1st.

C. G. NANZ,
1007 Walnut St., Owensboro, Ky.

ROOTED CUTTINGS. Per 100

Alyssum, double	$ .50
" " 4-inch pots	8.00
Ageratum, double, blue or white	.75
Heliotrope, blue	.75
Carnations, Hinze's White	1.00
Chrysanthemums, Standard sorts; general assortment, labeled	2.50
Special sorts at special prices.	
Linum flavum	1.50
" " 6-inch pots, each 20 cts.	
Verbenas, out of soil, to color only, large flowers and distinct colors	1.25
Antherieum vittatum, strong, 4-in. pots, 20c. each	
" **picturatum**	20.00 25c. each

TERMS—Invariably cash, or satisfactory reference. No orders filled for less than one dollar.

JOHN CURWEN, Jr.,
(Money Order Office.) VILLA NOVA, PA.

Always mention the American Florist when writing to advertisers.

CHRYSANTHEMUMS

We Offer for a Short Time the Following Standard Sorts. The Plants are in the Pink of Condition.

					Per 100
W. H. Lincoln,	stock plants,	4-in pots			$15.00
H. E. Widener,	"	"	"	"	25.00
Ivory,	"	"	"	"	25.00
Domination,	"	"	"	"	15.00
Mrs. Geo. Bullock,	"	"	"	"	15.00
L. Canning,	"	"	"	"	15.00
W. H. Lincoln,	"	"	2-in.	"	3.00
H. E. Widener,	"	"	"	"	5.00
Ivory,	"	"	"	"	4.00
Domination,	"	"	"	"	3.00
Mrs. Geo. Bullock,	"	"	"	"	3.00
L. Canning,	"	"	"	"	3.00
Potter Palmer,	"	"	"	"	5.00
Ruth Cleveland,	"	"	"	"	5.00
Mrs. E. D. Adams,	"	"	"	"	6.00
Minnie Wanamaker	"	"	"	"	5.00
Mrs. Irving Clark,	"	"	"	"	3.00
Louis Boehmer,	"	"	"	"	3.00
Mrs. B. Harrison,	"	"	"	"	3.00
Kiolo,	"	"	"	"	3.00

Rooted Cuttings ready Feb'y 25th of the following Varieties:

Mrs. Geo. Bullock, L. Canning, Kiolo, Domination, Mrs. B Harrison, Louis Boehmer, at ..... $1.50 per 100
H. E. Widener, Ivory ..... $2.50 per 100

25 at 100 rate. Packing free.

JOHN IRVINE CO.,
Bay City, Mich.

P. S. Adiantum Capillus Veneris, 2-inch, a fine lot now ready for shipment at $5 per 100. Nephrolepis Exaltata, 3-inch, $7 per 100.

CLEMATIS.

	Doz.	Hundred
2 Year Choice Assortment	$3.00	$25.00
1 " " "	2.00	15.00
H. P. Roses, Choice named kinds	1.50	10.00
Monthly " " " "	1.25	8.00
Daisy Snowflake, strong plants	.50	3.00
Dahlias, field grown, choice named	1.25	8.00

F. A. BALLER,
BLOOMINGTON, ILL.

NOVELTIES IN CANNAS.

These four sorts are unquestionably by far the best varieties that have been sent out since the introduction of Mme. Crozy; they are all equally good, if not superior, but entirely distinct in every way.

FOR the past two or three years we have made the improved varieties of Cannas a specialty, and have gathered together for trial everything that has been offered that we have considered promising, and in pursuance of our usual policy of working up large stocks of the best things after thorough trial, have pleasure in offering the following novelties which we can recommend, and which our customers can purchase with entire confidence and can recommend them to their customers, as they are novelties of extraordinary merit and will give unquestioned satisfaction. The improvement in this class of plants is so marked there will be no place for the so-called French Cannas that were grown even two or three years ago, from this time out. Every florist in the United States who sells plants should invest in these Cannas to a greater or lesser extent. They make one of the finest plants for the decoration of the greenhouse that one can have, and the flowers can be used for cut flowers in decorative work with most telling effect, as there is nothing that approaches them in brilliancy and grandeur. For bedding plants for grouping on the lawn they are brighter than any other plant, and unite, with brilliant flowers, foliage of tropical luxuriance. We introduced Mme. Crozy very largely last season, and everyone who purchased it has been more than pleased with it. We have without question the largest stock of Mme. Crozy to be found anywhere, and can furnish it in any quantity. We now offer four novelties for this season, which we have propagated extensively, believing them to be the best and most distinct and valuable kinds in their respective colors that have been sent out since Mme. Crozy.

ALPHONSE BOUVIER.—This is the grandest Canna, all things considered, introduced up to this time. It is a very luxuriant grower, growing considerably taller than Mme. Crozy, throwing up flower stems freer than that variety. In good ground and under good cultivation the plant will grow eight feet. The tips of the shoots are surmounted by immense clusters of bright crimson flowers of the very largest size, and nothing can exceed their brilliancy. It has a peculiar habit of dropping the flower cluster a trifle as the second flowering shoot begins to push above the first, and the shoots flower two, three or more times, one after the other, a large plant in bloom sometimes having on as many as thirty or forty of these large brilliant clusters of flowers. Grand is the only word that describes this variety. It was sent out very little last Spring, but there was no supply of it to be had at anything like a reasonable price, and we purchased all we could obtain of it, paying as high as $1.25 each for it; but there was none to be had even at this high price. We were fortunate, however, in securing a larger supply of it than any one else, and are pleased to say we can offer it at a low price the coming season. We think for general bedding purposes it will, if anything, surpass Mme. Crozy—at least, if not surpass it, it certainly will meet with equal favor. As a pot plant for greenhouse cultivation, it is not so desirable on account of its taller growth, but for bedding purposes in many ways it will be superior. It is entirely distinct, and as the color is absolutely different, one will not conflict with the other in any way.

CAPTAIN P. DE SUZZONII.—We have tested all the yellow varieties of Cannas that have been introduced so far up to this time, and can say without hesitation this variety is the best yellow Canna introduced so far. It is almost as large a flower, with about as broad a petal, as Mme. Crozy, with a very large spike of bloom, and is slightly mottled with scarlet. The scarlet markings are such, however, that instead of detracting, as is usual with most of the yellow Cannas that have been so marked heretofore, it intensifies, if anything, the brilliancy of the yellow. There is a great demand for yellow Cannas on account of the desirability of the color and this is bound to have a heavy run in consequence. It has a distinct habit of growth, the foliage very nearly approaching the banana.

PAUL MARQUANT.—This variety is not much known, but it is one of the most distinct of all the varieties, and one of the most beautiful. Many who have seen it in our houses have considered it preferable to any other variety, not excepting Mme. Crozy. The individual flowers are larger than any other, and the flower spike very large, each flower standing out separately by itself. The flower is as fine as the finest orchid. The color is very hard to describe, to give any adequate idea of how beautiful a shade it is. It might be described as a bright salmon, with a carmine tint. The flower has a silvery lustre, which glistens and lightens it up with a silvery sheen, making the salmon of the flower very brilliant. Some have described it as apricot—a shade that is so fashionable at the present time. For greenhouse culture it is one of the finest of all, as the growth is not as tall as the two preceding sorts.

MISS SARAH HILL.—This variety somewhat approaches Alphonse Bouvier in color, but is entirely different in every way. The flower spike is held erect and upright; the crimson has considerable carmine in it, and so it may be called a carmine-crimson. It is entirely different from Alphonse Bouvier in the style of the flower spike, and in the habit of growth; the flower spike is held erect, and while the head is not so large as Bouvier, it is of more dwarf growth, and holds its head of bloom a trifle longer than Bouvier. Its main merit lies in the fact of its being more dwarf, so that it can be used where it would not be practicable to use Alphonse Bouvier.

PRICE, $6 00 PER DOZEN; $40.00 PER 100. PRICE FOR LARGER QUANTITIES ON APPLICATION.

SEE OUR ADVERTISEMENT OF NEW CANNAS IN LAST ISSUE—"MME. CROZY" AND "STAR OF '91," ETC.

F. R. PIERSON COMPANY,

TARRYTOWN-ON-HUDSON, N. Y.

Toronto.

Before I forget it again I must thank the AMERICAN FLORIST on behalf of the G. and F. Association for the handsome chromo of the Horticultural Hall at the World's Fair. The "deil" seems to have been in the picture. Mr. Ewing put it in a frame and set it on a cupboard in his potting shed and during a meeting of the chrysanthemum committee it fell down on the top of the President's head; neither was broken however. The secretary in setting it up again knocked some tool down which fell on to his head, neither of these latter were broken either. In carrying it up to the Association meeting room the carrier slipped and cracked the glass. At the meeting the picture was set before the president's desk, when he, getting a little excited no doubt, shook the desk and the picture fell again, the secretary put out his foot to save it but put it through the glass breaking it to slivers. This ended the chapter of accidents; but the chromo still remains intact.

Schomburgkia undulata in the store at Sir D. S. Macpherson's (Mr. Geo. Vair) was flowering finely the other day, it was very striking and distinct. Mr. Houston at the Central prison had Dendrobium Brymerianum in flower; it is very curious and pretty too, it might be called "old man" dendrobium.

D. J. Hoskin, Q. C., has decided not to allow his plants to go to the World's Fair, which is much to be regretted; a very large Kentia Belmoreana in splendid condition and several Latania borbonica will be a great loss to the exhibit. It is still a little doubtful if Sir D. S. Macpherson will allow his plants to go, but considerable pressure is being brought to bear on him and it is hoped that he may yield. However there will be a large and fine exhibit even without these from the public parks and gardens and those who take them to Chicago need not be ashamed to unpack them by any means.

Trade is dull now, though the florists' windows look very tempting and spring like.

The "single stem" rule has been left out of the chrysanthemum show prize list this year—R. I. P. E.

IF YOU print your spring trade list in our special rose number, to be issued March 30, it will go to every florist in America and will be preserved by the recipient.

Siebrecht & Wadley,

ROSE HILL NURSERIES,

NEW ROCHELLE, N. Y.

Palms, ORCHIDS, Roses, and New Plants.

FRESH DRACAENA CANES NOW READY.

ORCHIDS.

The Finest Stock in the World.

SANDER'S, ST. ALBANS, ENGLAND.

Thirty minutes from London.

Our Mr. A. Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City.

MARCH 15th

WILL BE THE DATE OF OUR SECOND DISTRIBUTION OF THE

Grand New Chrysanthemum

NIVEUS.

This grand variety is unquestionably the best white either for exhibition or commercia purposes. It was in competition with all the best seedlings at the Western shows, and winner of the highest honors wherever shown. All orders booked previous to March 1st, we shipped on that date.

Price, 75c. each; doz. $7.50; 25 $14; 50 $25; 100 and over $40 per 100.

PLACE YOUR ORDER AT ONCE TO INSURE PROMPT DELIVERY MARCH 15th.

All other Chrysanthemum Novelties of 1893. Stock and prices quoted on application.

NATHAN SMITH & SON,

167 W. Maumee St., ADRIAN, MICH.

CHRYSANTHEMUMS. Fine young plants of the following varieties from 2½-in. pots. These plants are neither drawn up nor hard-wooded:

George Savage,	Hicks Arnold,	Harry May,	Ada H. Le Roy,
Viviand Morel,	Lillian Russell,	Roslyn,	Victor,
Mrs. R. C. Ogden,	Logan,	Wm. Falconer,	Margaret Graham,
Mrs. A. J. Drexel,	Rosstrevor,	Leala,	Mrs. Wm. F. Dreer,
Ada McVicker,	Col. Wm. B. Smith,	Mrs. E. D. Adams,	Ruth Cleveland,
Mrs. J. N. Morrissy,	Geo. W. Childs,	Emma Hetzeroth,	Mrs. W. S. Kimball.

THE ABOVE 10 CENTS EACH.

Robert Flowerday,	Violet Rose,	W. H. Lincoln,	Louis Boehmer,
John Goode,	Gold,	Minnie Wanamaker,	Yonitza,
Mistletoe,	Source d'Or,	H. E. Widener,	Advance,
Eda Prass,	E. G. Hill,	Excellent,	J. C. Vaughan,
Col. H. M. Bois,	Ada Spaulding,	L. Canning,	Gloriosum,
Waban,	Mrs. Irving Clark,	Thorpe Junior,	Potter Palmer,
J. W. Gerard,	Jessica,	Puritan,	Ferdinand Feral,
Etoile de Lyon,	W. K. Harris,	Aug. Swanson,	Neesima,
R. C. Ringston,	V. H. Hallock,	Mrs. John Westcott,	Cullingfordii,
Elmer D. Smith,	Rohallion,	John Thorpe,	Mrs. Fottler,
Ivory,	Domination,	Kioto,	Mrs. J. C. Henszey.
Pelican,	Mermaid,		

THE ABOVE 5 CENTS EACH.

WILLIAM SCOTT, MAIN AND BALCOM STREETS, BUFFALO, N. Y.

100,000

CHRYSANTHEMUM PLANTS,

$6 00 a 100. Choicest up to 1891 Novelties.

SHERWOOD HALL NURSERY CO.,

MENLO PARK and SAN FRANCISCO, - CALIFORNIA.

ROSES AND CARNATIONS. The Largest and Finest Stock in the Northwest ever offered at the following prices:

ROSES—Perles, Hoste, Sunset, La France, Mermet, Bride, C. Soupert, Niphetos, from 2½-inch pots, $4.00 per 100
Mme. Watteville, Albany, Pierre Guillot, Meteor, from 2½-inch pots ..... 5.00 per 100
American Beauty, from 2½-inch pots ..... 7.00 per 100

CARNATIONS—Silver Spray, Lizzie McGowan, Hinze's White, Hector, Portia, Garfield, Grace Wilder, Fred. Creighton, Mrs. E. G. Hill, from 2-inch pots ..... 3.00 per 100
Rooted Cuttings of all varieties offered ..... 2.00 per 100

Cut Flowers, Roses, Carnations Lilium Harrisii and Smilax at lowest market prices. Telegraph orders promptly attended to. CHRIST HANSEN, Wholesale Florist, ST. PAUL, MINN.

BY THE **THOUSAND.**

Araucaria excelsa, Aspidistra, Palms, Phormiums, Laurel, Bays, Crowns and Pyramids of all sizes.

Packing free for Cash with order.

THE NURSERIES. JULES DE COCK, LEDEBERG, near Ghent, BELGIUM.

A Specialty Bulb Begonias, extra vars. at $3 per 100.

CHRYSANTHEMUMS.

ROOTED CUTTINGS.

Lincoln, Ada Spaulding, Domination, L. Boehmer, Rohallion and 20 other good market sorts, $1.50 per 100; Jessica and Ivory, $2.50 per 100. Ready for delivery January 15th.

Address J. G. BURROW, FISHKILL, N. Y.

Mention the American Florist when writing to advertisers on this page.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

YOUNG STOCK FOR TRANSPLANTING.

Better and cheaper than imported stock. Many articles are just the right size for mail trade. Orders for stock under this heading should be sent in early. After April 15th we are usually able to supply but few of them.

DECIDUOUS.

	Per 100	Per 1000
Acer platanoides (Norway Maple), 2 to 3 ft., trans	$ 3.00	$25.00
" pseudo platanus (Sycamore Maple), 2 to 3 ft., trans	2.50	20.00
" saccharinum (Sugar Maple), 2 to 3 ft., trans	3.00	25.00
Althea, Double (Rose of Sharon) separate colors, 1½ to 2 ft., branched	3.00	25.00
" " " " 2 to 3 ft., " "	4.00	35.00
" " " " mixed colors, 2 to 3 ft.	3.50	30.00
Ampelopsis Veitchii (Boston Ivy) 1 yr	2.50	20.00
Andromeda arboren (Sorrel Tree), 6 to 12 in.	10.00	
" Mariana (Stagger Bush), 8 to 12 in., trans	6.00	
" " " 12 to 18 in., trans	6.00	
Aralia spinosa (Hercules Club), 1½ to 2 ft.	3.00	
Azalea mollis (Japan Azalea), 4 to 6 in.	10.00	
Betula pendula laciniata (Cut-leaved Weeping Birch), 4 to 6 ft.	20.00	
Berberis (Thunbergii (Japan Berberry), 6 to 8 in	3.00	
" vulgaris atropurpurea (Purple-leaved Berberry), 1 yr., 6 to 8 in.	2.00	15.00
" " " 2 yrs., 12 to 18 in.	3.00	25.00
Calycanthus floridus (Sweet Scented Shrub), 2 yrs., 12 to 18 in.	1.50	10.00
Castanea Americana (American Sweet Chestnut), 1 yr	1.25	10.00
" " " " 1½ to 2 ft., trans	4.00	
" vesca (Spanish Chestnut), 2 yrs., 12 to 18 in.	2.00	12.00
" " " 2 to 3 ft., trans	6.00	50.00
Catalpa syringæfolia aurea (Golden-leaved Catalpa), 1 yr.	2.50	20.00
Celastrus scandens (Bitter Sweet), 1 yr.	2.50	
Cercis Canadensis (American Judas), 10 to 15 in.	2.00	
" Japonica (Japan Judas), 4 to 6 in.	4.00	
Chionanthus Virginicus (White Fringe), 6 to 12 in.	4.00	
" " " " 12 to 18 in	6.00	
Citrus trifoliata (Hardy Orange), 1 yr.	3.00	25.00
" " " 2 yrs.	6.00	50.00
Clematis flammula (Virgin's Bower), 2 yrs.	5.00	40.00
Cornus Siberica elegantissima (Variegated-leaved Red-branched Dogwood), 12 to 18 in	8.00	
Carya alba (Shellbark Hickory), 9 to 12 in., trans	5.00	
" olivæformis (Thin-shelled pecan), 1 to 2 ft., trans	4.00	
" " " 2 to 3 ft.,	6.00	50.00
Cydonia Japonica (Japan Quince), 2 yrs.	2.00	
Cytisus Laburnum (Golden Chain), 2 yrs., trans.	2.00	
Deutzia gracilis. June rooted	2.50	
" " 2 yrs., 6 to 12 in	5.00	
Euonymus Europæus (European Burning Bush), 3 yrs.	1.50	
Exochorda grandiflora. 1 yr.	2.50	
Fagus Americana (Am. Beech), 18 to 24 in.	2.00	15.00
" sylvatica (European Beech), 3 yrs.	2.00	15.00
" purpurea (Purple-leaved Beech), 8 to 12 in.	5.00	
" " " 2 to 3 ft., stocky	20.00	
Hippophæ rhamnoides (Sea Buckthorn), 2 yrs	1.50	
Hydrangea paniculata grandiflora, June rooted	2.50	20.00
" 2 yrs., 12 to 18 in.	4.00	30.00
Hypericum aureum, June rooted	3.50	
Juglans cinerea (Butternut), 1½ to 2 ft., trans.	3.00	25.00
" nigra (Black Walnut), 1½ to 2 ft., trans.	3.00	20.00
" " " 2 to 3 ft., trans.	4.00	30.00
" regia (English Walnut), 2 yrs.	3.50	
" " " 2 to 3 ft., trans	8.00	
" " " prepartoriens (Dwarf English Walnut), 1 yr., 1 to 2 ft	6.00	
Juglans regia, prepartoriens (Dwarf English Walnut), 1 yr., trans.	12.00	
Kerria Japonica variegata (Variegated-leaved Corcorus), 1 yr	3.50	
Koltreuteria paniculata, 2 yrs.	2.00	
Larix Europæa (European Larch), from Scotch seed, 1½ to 2 ft., trans.	2.50	20.00
Ligustrum ovalifolium aureum (California Privet), June rooted.	2.00	15.00
Liquidamber styraciflua (Sweet Gum), 6 to 10 in.	2.00	
Liriodendron tulipifera (Tulip Tree), 12 to 18 in.	2.00	
Lonicera Halleana (Hall's Japan Honeysuckle), June rooted	2.50	
" Japonica reticulata (Golden-veined Honeysuckle), June rooted	2.50	
" periclymenum Belgica (Monthly Dutch Honeysuckle), June rooted	3.00	
Lycium Chinensis (Chinese Matrimony Vine), seedlings, 2½ in pots	4.00	
" " rooted cuttings, 2½ in pots, strong	6.00	
Pæonia arboren (Tree Peonies), 2 yrs.	25.00	
Paulownia imperialis, 2 yrs., 3 to 5 ft.	8.00	
Philadelphus coronarius aureus (Golden-leaved Syringa), 1 yr., 4 to 6 in.	4.00	30.00
" " " 2 yrs., 6 to 9 in.	5.00	40.00
Populus Canadensis (Canadian Poplar), 5 to 6 ft., trans	4.00	30.00
" " " 6 to 8 ft., trans	5.00	40.00
" " aurea Van Geertii (Golden-leaved Poplar), 3 to 5 ft.	5.00	40.00
Prunus Pissardi (Purple-leaved Plum), on own roots, 1½ to 2 ft., br'chd	8.00	70.00
Quercus orris (Turkey Oak), 2 yrs.	2.00	
" rober (British Oak), 2 yrs	2.00	
Rhus cotinus (Purple Fringe), 1 yr.	2.00	15.00
Rosa rubiginosa (Sweet Briar), true, 1 yr.	2.50	20.00
" rugosa (Japan Rose), 1 yr., 6 to 9 in.	7.00	
" " " 2 yrs., 12 to 18 in.	10.00	
Salisburia adiantifolia (Maidenhair), 2 yrs.	3.50	
Sambucus nigra aurea (Golden Elder), June rooted	3.00	
" " 1 yr., 12 to 18 in	5.00	40.00
Sorbus aucuparia (European Mountain Ash), 2 to 3 ft.	3.00	

	Per 100	Per 1000
Spiræa Bumalda, June rooted	2.50	
" callosa (Fortunii), June rooted	2.50	
" " alba (Fortunii alba), June rooted	2.50	
Syringa vulgaris (common Lilac), 3 yrs.	2.00	15.00
" " alba (common White Lilac), 2 yrs.	2.00	15.00
" " Charles X, 3 yrs.	8.00	
" " Josikæ, 2 yrs., trans	3.50	
Tecoma radicans (Trumpet Flower), 2 yrs.	3.00	25.00
Viburnum opulus sterilis (common Snowball), 1 yr.	4.00	30.00
" " fl. pl. (Double Snowball), 1 yr.	6.00	
Ulmus Americana (Am. Elm), 2 yrs., 18 to 24 in.	1.50	10.00
Weigelia candida (White Weigelia), June rooted	2.50	
" " " 1 yr., 2 to 3 ft.	5.00	40.00
" Lavallei, June rooted	2.50	
" " 1 yr., 1½ to 2 ft.	5.00	
" nana variegata (Dwarf Variegated-leaved W), June rooted	2.50	
" " " " 1 yr., 12 to 18 in.	4.00	

EVERGREENS.

	Per 100	Per 1000
Abies Canadensis (Hemlock Spruce), 2 yrs., trans	2.50	20.00
" Douglasii (Douglas Spruce), 9 yrs., trans.	3.50	
" Englemanni (Engleman's Spruce), 1 yr	2.00	15.00
" excelsa (Norway Spruce), 9 to 12 in., 2 trans	4.00	30.00
" orientalis (Oriental Spruce), 3 yrs.	2.50	
" pungens (Colorado Blue Spruce), Colorado seed, 1 yr.	2.50	20.00
Azalea amœna, June rooted	5.00	
" " 1 yr., 6 to 9 in.	10.00	
" " auperba, June rooted	8.00	
" " " 6 to 9 in.	15.00	
Buxus arborescens (Tree Box), 1 yr.	4.00	
" " 2 yrs., 6 to 9 in.	6.00	
" " longifolia, 1 yr.	4.00	
" " " 2 yrs., 6 to 9 in.	6.00	
" " aurea (New Golden Box), 1 yr.	6.00	
Euonymus Japonicus Duc d'Ammale, June rooted	3.50	
" " radicans variegatus, June rooted	2.50	20.00
" " " 1 yr., 4 to 6 in.	3.50	
Ilex aquifolia (European Holly), 8 to 12 in.	6.00	
" opaca (American Holly), 6 to 8 in.	5.00	
" " " 6 to 9 in.	10.00	
" " " 1½ to 2 ft.	4.00	35.00
Juniperus communis aureus (Douglas' Golden Juniper), 1 yr.	6.00	50.00
" " " 2 yrs., fine	2.50	
" " Hibernica (Irish Juniper), 1 yr.	6.00	
Kalmia angustifolia (Narrow-leaved Mountain Laurel), 6 to 8 in.	6.00	
" latifolia (Broad-leaved Mountain Laurel), 6 to 10 in.	3.50	
Leiophyllum buxifolium (Sand Myrtle), 4 to 6 in.	5.00	
" " " 6 to 8 in.	2.50	
Mahonia aquifolia, 3 yrs. trans., 6 in.	3.50	
" Japonica, 3 yrs. trans., 6 to 8 in.	2.50	
Picea balsamea (Balsam Fir), 3 yrs. trans	4.00	
" Nordmanniana (Nordman's Silver Fir), 3 yrs. trans.	8.00	
" pectinata (European Silver Fir), 12 to 18 in. trans.	6.00	
Pinus cembra (Swiss Stone Pine), 2 yrs. trans.	3.00	
" excelsa (Weeping Bhotan Pine), 3 yrs.	3.00	
" Mugho (Dwarf Mugho Pine), 6 to 9 in.	2.50	
" strobus (White Pine), 4 yrs.	6.00	
Retinospora ericoides, 2 yrs., 5 to 10 in trans.	10.00	
" filifera, 2 yrs., 12 to 18 in. trans.	10.00	
" obtusa nana, 2 yrs., 4 to 6 in. trans.	8.00	
" pisifera, 2 yrs., 12 to 18 in. trans.	8.00	
" plumosa, 2 yrs., 12 to 18 in trans.	10.00	
" " argentea, 2 yrs., 6 to 9 in. trans.	8.00	
" " aurea, 2 yrs., 9 to 12 in. trans.	8.00	
" squarrosa Veitchii, 2 yrs., 6 to 12 in. trans.	50.00	
Rhododendron, finest named hardy sorts, 2 yrs. grafts	15.00	
" hybrid seedlings, 9 to 12 in.	7.50	
" maximum, 8 to 10 in.	6.00	
Taxus baccata elegantissima, 1 yr.	6.00	
" " erecta, 1 yr.	12.00	
" " Hibernica [Irish Yew], 12 to 18 in. trans	4.00	30.00
Thuja occidentalis [American Arbor Vitæ], 9 to 12 in trans.	6.00	
" " aurea [Geo. Peabody Arbor Vitæ], 1 yr	10.00	
" " " " 2 yrs., 6 to 12 in., trans.	3.50	
" " conica densa, 1 yr.	6.00	
" " " " 2 yrs., 6 to 9 in. trans.	5.00	
" " compacta, 2 yrs., 8 to 10 in. trans.	4.00	
" " Douglasii [Douglas' Golden Arbor Vitæ], 1 yr.		
" " Ellwangeriana [Tom Thumb Arbor Vitæ], 2 yrs., 9 to 12 in., trans	5.00	
Thuja occidentalis globosa [Globe Arbor Vitæ], 2 yrs., 6 to 8 in., trans.	5.00	
" " Hovey'i [Hovey's (Golden Arbor Vitæ], 2 yrs., 9 to 12 in., trans	5.00	
Thuja occidentalis, Little Gem, 2 yrs., 3 to 5 in	7.50	
" " pyramidalis [Pyramidal Arbor Vitæ), 2 yrs., 12 to 15 in., trans	6.00	
Thuja occidentalis Siberica [Siberian Arbor Vitæ], 2 yrs., 6 to 9 in., trans.	5.00	
Thujopsis borealis [Nootka Sound Cypress], 1 yr.	4.00	
Yucca filamentosa [Adam's Needle], 2 yrs., fine	4.00	30.00

J. T. LOVETT CO., Little Silver, N. J.

HEADQUARTERS FOR WATER-LILIES

SEED TUBERS AND PLANTS.

Place your orders early if you wish to secure good stock of charming yellow Water Lily, N. Chromatella plants. 1st size, $100 each, $10 doz.; 2d size, 75c each, $8.00 per doz. Also, the new French and other new hardy varieties. Send for price list.

Wm. Tricker, DONGAN HILLS, NEW YORK.

CANNA TUBERS.

Robusta Perfecta	$3 00 per 100
Emile Le Claire	2 50 "
Ehmanii	5 00 "
Jules Cretien	5 00 "
Hippolite Flandrin	5 00 "

Large and sound, 25 of any variety, for cash.

W. A. LEE,
BURLINGTON, VT.

COLEUS ROOTED CUTTINGS

The Best Twelve Bedders.

Also, Althernanthera Aurea Nana and different Bedding Plants. For prices, address

C. F. SCHNEIDER, Oconomowoc, Wis.

Azalea Indica

In bud or bloom, from 75c. to $1.50 each.

LILIES FOR EASTER,

HARRISII, LONGIFLORUM,
CANDIDUM, RHODODENDRONS.

☞ SEND FOR PRICES.

WILLIAM A. BOCK,
NORTH CAMBRIDGE, MASS

Double White Primrose produces large quantities of fine white flowers, (valuable for all kinds of cut flower work), every florist should have it; 2, 3, 4, 5-in. pots @ $8, $10, $12 and $15 per 100 plants in full bloom.

Large assortment of the best Roses, Carnations, Chrysanthemums, M. H. Fern, Coleus, Violets, Geraniums, etc., for florists use. Send for trade price list to

HENRY SMITH,
130 Monroe St. Grand Rapids, Mich.

Always mention the AMERCAN FLORIST when writing to advertisers.

SPLENDID STOCK.

		Per 100
Althernantheras P. Major, aurea nana	2-in. pots,	$2.00
Begonias, flowering sorts	2½-in., "	4.00
Coleus, in 12 splendid sorts	2-in, "	2.50
Cyclamen, in bud or bloom	3½-in. "	8.00
Chrysanthemums, 40 splendid sorts	2-in. "	3.00
Dahlias, large roots, 30 varieties	"	5.00
Geraniums, double and single sorts	2½-in. "	4.00
" silver leaved sorts	2½-in. "	4.00
" ivy leaved sorts, including Jeanne d'Arc	2½-in. "	4.00

HANS NIELSON, St. Joseph, Mo.

ASTER SEED

Mary Semple, (Pink), and Semple's White (white), mixed. Finest strain on the market. Price, $1 per pkt., $5 per oz.

JAMES SEMPLE, FLORIST
Box 2. BELLEVUE, PA.

Eucharis Amazonica.

Replying to the inquiry of "Buffalo" on page 710 of your valuable paper on how to grow eucharis I would state that the best results I ever saw in blooming this bulb were attained in Reading, Pa. The bulbs were planted in a bench ten inches deep, filled with what was apparently the scrapings of a brick yard, so coarse was the soil. The grower told me he took decayed sod, broke it up quite coarsely, threw in a lot of broken brick or pots, so as to make the drainage perfect and then planted the dry bulbs six inches apart, giving the soil a thorough soaking with water. This was allowed to suffice until the bulbs started into growth, when he began watering lightly until the growth leaves were well started, then giving them all the water the soil would stand, which was considerable. By this method the grower cut thousands of flowers from a bench three feet wide by one hundred feet long, and I believe him, for I never saw such a profusion of eucharis bloom. After the flowers were all cut, the plants were allowed to dry off and rest for three or four weeks, when they were watered again as before, and the leaves would again appear in a few days. This treatment gave two, and some years three crops of flowers. C. H. ALLEN.

Floral Park, N. Y.

Cypripedium Lathamianum.

If Mr. Chadwick will refer to the London *Garden* of February 15, 1890, he will find that the Messrs. Veitch exhibited in London the reversed cross of C. Lathamianum, and its principal characteristics are noted, but the plant is not there named. Messrs F. Sander & Co., in their published pamphlet of all cypripediums, species and hybrids, up to date of publication, 1892, give to the plant in question the name of C. Lathamianum inversum. I have not access to any other English periodical of the above date so cannot say whether the plant was so named when exhibited by Messrs. Veitch, but the probabilities are that it was.

E. O. ORPET.

South Lancaster, Mass.

Rooted Cuttings.

COLEUS - Verschaffeltii, Golden Verschaffeltii, Attraction, Admiration, Firebrand, Golden Bedder, and twelve leading varieties, by mail, 85 cts. per 100, or $7.00 per 1000.
Heliotrope, 3 best varieties..... $1.00 per 100
Salvia Splendens, dwarf..... 1.00 "
Dwarf Ageratum, white and blue..... .75 "
3000 Double English Daisies ..... 2.00 "
Dwarf Double Alyssum..... .50 "
Sultani, and other bedding plants in variety. Any of the above can be furnished from 2-inch pots on advance of 25 cts. per hundred. Stock strong, healthy and free from disease. Cash with order.

R. E. NACE, box 62, Ryersford, Pa.

FOR SALE OR EXCHANGE.

Peony roots, white, pink, maroon and rose, good divided roots, $5 per hundred. Full size, two year clumps, $18 per hundred. Will sell for cash or exchange for small stuff. Write for particulars.

WANTED.

Acacia Riceana, Bambusa Nana, Azara Microphylla. Anyone having one or more of the above please send description of stock and state price.

THE WISCONSIN FLOWER EXCHANGE, Milwaukee, Wis.

FOR SALE.
10,000
Rooted Cuttings of Alternanthera

P. major and A. nana, 90c. per 100; $7.00 per 1000. Fine stock.

C. K. HOFFMEYER, Mansfield Valley, Pa.

Please mention the AMERICAN FLORIST every time you write to an advertiser.

F. & O. T. S. R. V. P. B. S.

Stand for Fruit and Ornamental Trees, Shrubs, Roses, Vines, Plants, Bulbs, Seeds. One of the very largest and best assortments in the U. S.

SPECIAL SURPLUS

In Fruits, Apple, Standard and Dwarf Pear, Plum, Peach, Grape Vines, Small Fruits, etc.
In Ornamentals for Lawn, Street and Park Planting, Ash, Alder, Balm of Gilead, Birch, Beech, Catalpas, Elms, Maples, Magnolias, Oaks, Poplars, Salisburias, Tulip Trees, Willows, etc.
In Evergreens, Arbor Vitæ, Box, Cupressus, Firs, Junipers, Pines, Rhododendons Retinisporas, Spruces, etc.
In Shrubs, Altheas, Berberry, Cornus, Corcorus, Calycanthus, Deutzias, Forsythea Fringe, Hydrangea, Honeysuckle, Lilac, Privet, Spireas, Syringa, Weigelia, etc.
In Climbing Vines, Ampelopsis, Bignonia, Clematis, Honeysuckle, Ivy, Wistaria, etc.
In Roses and Plants, In extensive assortment; of the former we grow three-fourths of a million, of the latter millions, a year. For more complete assortment send for Trade List, free to Nurserymen, Florists and Dealers.

39 YEARS. 28 GREENHOUSES. 900 ACRES.

THE STORRS & HARRISON CO., Painesville, Lake Co., Ohio.

100,000 VERBENAS. THE CHOICEST VARIETIES IN CULTIVATION.

Fine pot plants, $2.50 per 100; $20 00 per 1000 Rooted Cuttings, $1 00 per 100; $8 00 per 1000.

NO RUST OR MILDEW.

Packed light, and satisfaction guaranteed. Send for circular. . . .

Our sales reached nearly 250,000 last year, and we can assure our customers that our plants are fully equal, and assortment of varieties surpass those of last year.

J. L. DILLON, Bloomsburg, Pa.

Rooted Cuttings

of Evergreens, Hardy Flowering Shrubs and Hardy Perennials (Achillea, iberis, etc.) raised on contract for spring delivery. SEND LIST OF WANTS.

. . . ISAAC C. ROGERS, MOORESTOWN, N. J.

"CHRYS-COLA"

ROOTED CUTTINGS COLEUS.

I have a large stock of the best bedding varieties, and an extra quantity of Golden Verschaffeltii.

FUCHSIAS. For immediate delivery, Chas. Blanc, W. E. Wait, Black Prince, Noveau Mastadonte, 18 cts. per doz.; $1.00 per 100.

GERANIUMS are ordered to April 1st.

SEND FOR PRICE LIST.

S. B. FIELD, Roselle, N. J.

Association "Flora"

BOSKOOP, HOLLAND.

Now on hand in New York:
CLEMATIS, 3 Years, per 100, $30.00
H. P. ROSES, for forcing, " 9.00
In the best variety, as Alfred Colomb, Anna de Dieshach, B Rothschild, Fisher Holmes, Gen. Jack, La Fiance, Mme. G. Luizet, Mme. Plantier, Magna Charta, Paul Neyron, P. C. de Rohan, Merville de Lyon, Perle des Blanches, Ulrich Brunner and other sorts. Azaleas, Rhododendrons, Spiræas, etc We also have Palms, Dracænas, Araucarias and Bay Trees at our nurseries in Holland. Catalogue on application.

P. OUWERKERK, 206 Cambridge Ave., JERSEY CITY, N. J.

MAGNOLIAS

OBOVATA GRACILIS AND PURPUREA.

Fine, bushy plants, 3 to 8 feet, from $25.00 to $200.00 per 100.

Send for descriptive catalogue and wholesale price list free to all in the trade.

SAMUEL C. MOON, MORRISVILLE, Bucks Co., PA.

1,000 CHRYSANTHEMUMS, standard sorts, in flats, $1 00 per hundred Will exchange for rooted Coleus cuttings.

ALONZO W. VOSE, Manville, R. I.

TRY DREER'S GARDEN SEEDS.

Plants, Bulbs & Requisites. They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.

HENRY A. DREER, Philadelphia, Pa.

Mention American Florist.

VERBENAS, $2.50 per 100; $20.00 per 1000.

CANNAS, assorted, French, $3 per 100.
PELAGONIUM Fred Dorner, fine plants showing bud, $10.00 per 100.
ROSES, H. P's, Climbers, Forcers.

JOSEPH HEINL, Jacksonville, Ill

THE FINEST BUTTERFLY TULIP

in cultivation is Calochortus Bouplandianus.

A Mexican species for spring planting. Grows about 18 inches high and bears from 6 to 12 handsome, dark purple and yellow flowers, on ample stems for cutting. Flowers an inch and a half long by one inch in diameter. Blooms later, after others are past flower. 75c per dozen; $4.00 per 100 by post. Many other Mexican bulbs. See next week's offer.

F. H. HORSFORD, Charlotte, Vt.

No Trees of 1st quality can ever be sent by mail. Mayhap you know it. By freight, prepaid if preferred, we ship safely 4, 5, or 6 ft. trees, 2-yr. Roses of rare excellence—everything! You actually pay less than for the puny stuff. 1,000 acres Nurseries. 20,000 acres Orchards. Exact information about trees and fruits. Stark Bros., Louisiana, Mo.

CANNAS

CHRYSANTHEMUMS.

Lowest Prices for Choice Stock. List Free.

T. H. SPAULDING, Orange, N. J.

TUBEROUS ROOTED BEGONIAS.

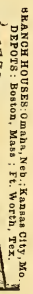
Best selling stock for Retail Florists. Order now and start into growth for early sales. Sell like hot cakes when in bloom. Try them if you never have. If you have, then you know it. In large quantities; choicest quality.

SINGLE, in 5 separate colors, white, yellow, scarlet, pink and crimson.....$6.00 per 100; $50.00 per 1000.
DOUBLE, in 5 separate colors.....$16.00 per 100. (Can be mailed for 30 cts. per 100.)

F. R. PIERSON COMPANY, TARRYTOWN ON THE HUDSON, NEW YORK.

FOR Florists, Nurserymen & Seedsmen

GEM STEEL GEM WIND ENGINE AND GEM STEEL TOWER



The **GEM ENGINE**, when furnished with Graphite Bearings, requires no oiling, no climbing of towers, no hinged or frail-jointed towers and practically **no attention**, yet is more durable than other Wind Motors that require all this and more unique in finish. The **GEM TOWER** combines beauty, strength, durability, simplicity to the greatest extent and has no equal. Both are manufactured and guaranteed by the oldest and most reliable Wind Mill Company in existence, and who build the **Halladay Standard Pumping** and **Geared Wind Mills**, the **Standard Vaneless** and **U. S. Solid Wheel Wind Mills**, Pumps, Tanks, Horse Hay Tools, &c. No other company offers equal advancements. Send for Catalogue and Prices.

BRANCH HOUSES: Omaha, Neb., Kansas City, Mo. DEPOTS: Boston, Mass., Ft. Worth, Tex.

U. S. WIND ENGINE & PUMP CO.
BATAVIA, ILL., U. S. A.
Mention American Florist.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaranteed.

CORRESPONDENCE SOLICITED.

Clear Cypress, from bottom gutter up is my specialty.

Lyman Felheim, ERIE, PA.

Mention American Florist.

J. N. STRUCK & BRO.

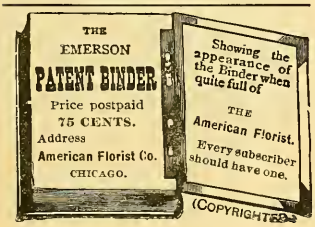
Manufacturers of

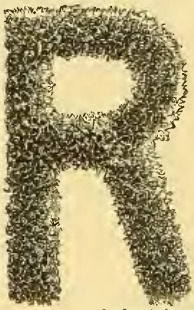
• CYPRESS •

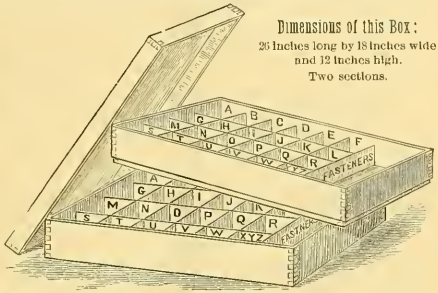
Greenhouse Material,

LOUISVILLE, KY.

Mention American Florist.







Dimensions of this Box: 26 inches long by 18 inches wide and 12 inches high. Two sections.

With an order for 500 letters, we furnish a box made of wood nicely stained and varnished, such as is represented in the cut.

BOSTON FLORIST LETTER CO.

Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1½-in and 2-in 2.00 per 100. Patent fastener with each letter.

OUR NEW SCRIPT LETTER, $4.00 per 100.

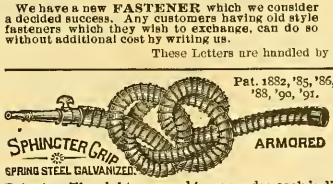
N. F. McCARTHY, Treas. & Mangr. | Address 13 Green St., **Boston, Mass.**

Address all correspondence to 1 Music Hall Place.

We have a new **FASTENER** which we consider a decided success. Any customers having old style fasteners which they wish to exchange, can do so without additional cost by writing us.

AGENTS:
Marschuetz & Co., 25 N. 4th St., Phila., Pa
A. Roiker & Sons, New York.
F. E. McAllister, 22 Dey St., New York.
A. D. Perry & Co., 33 Warren St., Syracuse, New York.
E. Kauffman, Philadelphia, Pa.
H. Bayersdorfer & Co., Philadelphia, Pa.
A. C. Kendal, 115 Ontario St., Cleveland, O.
J. A. Simmers, Toronto, Ont. Agent for Canada.
E. H. Hunt, 79 Lake St., Chicago, Ill.
Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.
H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O
T. W. Wood & Sons, 6th and Marshall Sts. Richmond, Va.
Jas. Vick's Sons, Rochester, N. Y.
C. A. Kuehn, 1122 Pine St., St. Louis, Mo.

These Letters are handled by all the Wholesalers in Boston.



Pat. 1882, '85, '86, '88, '90, '91.

FOR WATER, AIR, STEAM, ACIDS, OILS, LIQUORS, GAS, SUCTION,

And for any and every purpose for which a hose can be applied.

Sizes, ½-inch to 42 inches diameter.

The making, vending or use of any Serviceable Armored Wire Bound Hose not of our manufacture is an infringement on one or more of our Patents. The rights secured to us render each individual dealer or user responsible for such unlawful use with all the consequences thereof. For prices and discounts address **WATERBURY RUBBER CO.,** Sole M'f'rs and Owners of all the *Sphincter Grip Armored Hose Patents*, 49 Warren Street, New York.

J. C. VAUGHAN, Agent, CHICAGO.

ESTABLISHED 1866.

FLORISTS WIRE DESIGNS

MANUFACTURED BY

N. STEFFENS

335 EAST 21ST ST. NEW YORK.

Mention American Florist.

PLANT BED CLOTH.

CHEAP SUBSTITUTE FOR GLASS on Hotbeds, Cold Frames, etc. Three grades.

Light, Medium, Heavy.

Used by Florists, Gardeners, etc., invaluable for Tobacco Growers. Protects from frost. Promotes hardy, vigorous growth and keeps beds warm; will not shrink or mildew. For sale by the leading Dry Goods houses, Seedsmen, Florists, etc. Well known and extensively used. For circulars and samples apply

NATIONAL WATERPROOF FIBRE CO.,
50 South Street, - - NEW YORK.
Agents Wanted.
Mention American Florist.

HAIL

LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.

JOHN G. ESLER, Sec'y F. H. A., Saddle River, N. J.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

YOU CAN

SAVE MONEY BY PURCHASING, AND GLASS BY USING

HAMILTON'S PATENT SASH LIFTER.

"It works like a charm." So say those who use it. Send us 50 cents for one sample and you will say so too.

BAY STATE HARDWARE CO.,
272 Freeport Street, BOSTON, MASS.

Easter Decorations

will be enhanced vastly by using GREEN SILKALENE for stringing.

Send for Samples and prices.

JOHN C. MEYER & CO.,
289 Devonshire St., BOSTON, MASS.

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

Recent Legal Decisions.

Measure of Damages for Destruction of Orchard by Fire.

In an action for damages for the destruction of an orchard of fruit trees by fire, the measure of damages is not the cost of replacing the trees, and the value of the care and labor bestowed on the destroyed trees before the burning, but the value of destroyed trees at date of fire.

Stoner vs. Texas & P. Ry. Co. Supreme Court of Louisiana. 11 South. Rep. 875.

Passing of Title on Shipment of Goods.

The general rule is that a common carrier is the agent of either or both consignor and consignee, and may be made responsible to either, depending upon the circumstances of the case. The question of ownership of the goods is another and distinct question. Ordinarily the ownership of the goods in the shipper ceases upon the shipment and transmission of the bill of lading, unless, under special circumstances, the right of stoppage in transitu is resorted to. The consignment so completely passes the title to the consignee that he can sell to arrive, pledge or hypothecate by a transfer of the bill of lading. He can maintain replevin or trespass in regard to the goods. It will at once be seen that the question of agency for transportation is one entirely separate and distinct from that of the ownership.

A. Westman Mercantile Co. vs. Park. Court of Appeals of Colorado. 31 Pac. Rep. 945.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

THE BEST POTS.
THE CHEAPEST.
THE LOWEST FREIGHT RATES.
THE BEST OF PACKING.
THE LARGEST POTTERY IN THE STATE FOR MAKING STANDARD FLOWER POTS.

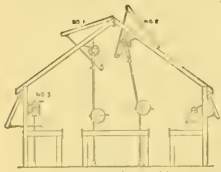
PRICE LIST OF POTS.

	Per 100		Per 100
2 inch	$ 3.25	6 inch	$ 2.20
2½ "	3.50	7 "	3.50
2¾ "	4.00	8 "	5.00
3 "	5.00	9 "	7.50
3½ "	7.25	10 "	10.00
4 "	9.00	11 "	15.00
5 "	13.80	12 "	20.00

Terms: Cash, free on board cars here. Address

HILFINGER BROS., Potters
FORT EDWARD, N. Y.

STANDARD VENTILATING MACHINERY.



Highest awards wherever exhibited.
Opens Sash as high at one end as at the other. With new device.
Everything Uniform.
Send for Catalogue.

E. HIPPARD, YOUNGSTOWN, O.

STOTT'S DISTRIBUTOR

Read Advertisement in next week's issue.

THE GREAT ANTIPEST.
For particulars, see next week.
R. W. CARMAN, GEN'L AGT.,
291 Amity Street, FLUSHING, Queens Co., N. Y.

"Standard" Flower Pots.

As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address

The Whilldin Pottery Company,

BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.

Every u.er of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.

A. H. HEWS & CO., N. Cambridge, Mass.

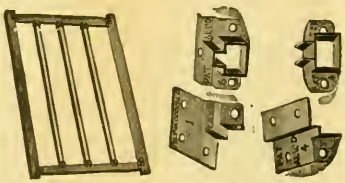
Standard Flower Pots.

We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.

SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY,
Manufacturing the
ELVERSON, SHERWOOD & BARKER
STANDARD FLOWER POTS.
Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bud Pots, etc.
ADDRESS PITTSBURGH CLAY MF'G CO., New Brighton, Pa.

H. M. HOOKER COMPANY,
57 and 59 W. Randolph Street, CHICAGO,
NATURAL GAS MADE GLASS
FOR GREENHOUSES.
Write for latest prices.



GARDENERS HOT-BED SASH,
INDESTRUCTIBLE.
CYPRESS GREENHOUSE WOOD WORK OF ALL KINDS.
Write for prices.
THE PEIRCE & COLEMAN CO.,
Dayton, Ohio.
J. C. VAUGHAN, Agent for Chicago and New York.

U. S. AND FOREIGN PATENTS Trade Marks, Designs, Opinions, Searches, &c., promptly attended to. Send sketch or model for free examination as to patentability. All work strictly confidential.
GEO. H. CHANDLEE,
Atlantic Building, WASHINGTON D.
Mention American Florist

Please mention the American Florist every time you write any of the advertisers on this page.

W & C. CO. LIMITED

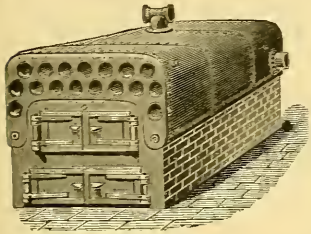
Wrought Iron
Pipe,
Fittings,
Valves,
ETC.
78 JOHN ST., NEW YORK.
WELLS & COUTAN CO., L'td.
Mention American Florist.

ESTABLISHED 1854.

DEVINE'S BOILER WORKS.

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers



Capacity from 350 to 10,000 feet of four-inch pipe. SEND FOR NEW LIST.

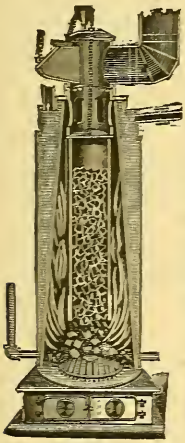
FRANK DAN BLISH, Att'y,

OFFICE, 189 STATE STREET.

WORKS, 56th & WALLACE STREETS.

CHICAGO.

Mention American Florist.



THE WILKS HEATER,

FOR HEATING

GREENHOUSES, STORES, DWELLINGS, ETC.

Manufactured by THE S. WILKS MF'G CO. 123 S. Clinton St., CHICAGO, ILL.

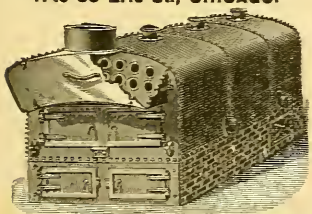
SEND FOR CATALOGUE.

KROESCHELL BROS.

IMPROVED

Greenhouse Boiler,

41 to 55 Erie St., CHICAGO.



Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around (front, sides and back). Write for information.

FLORAL DESIGNS

The Cut Flower Worker's friend. Fine book of 160 pages. Send $3.50 for it, to

HORACE McFARLAND, Harrisburg, Pa.

Mention American Florist.

THE "LOCKLAND"

Sash Bars

ARE ALWAYS SATISFACTORY.

This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.

GUTTER MATERIAL, RIDGES, SASH, ETC.

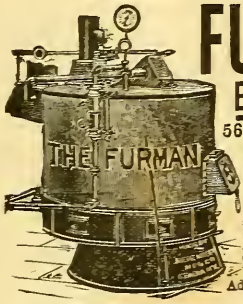
The finest CLEAR CYPRESS used.

Write for circulars and estimates. . . .

LOCKLAND LUMBER CO.

Lockland, O.

Mention American Florist.



FURMAN BOILERS

Economical — Substantial — Safe.

56 STYLES AND SIZES—BURNS HARD OR SOFT COAL.

Modern Hot-Water Heating

These Boilers have a high reputation for Staunchness, Durability and Safety, and are GREAT COAL SAVERS. Minimum Friction and Maximum Velocity only obtained by VERTICAL WATER CIRCULATION. Send for new 150-page book giving full particulars and a great deal of valuable information on modern Heating and Ventilation, with plans and tables for correct hot-water work. Mailed free.

Address HERENDEEN MFG. CO., 26 Vine Street, GENEVA, N. Y.

RIDER

Do You Want A RELIABLE SUPPLY OF **WATER**

For Your GREEN HOUSE, ROSE HOUSE, NURSERY, Conservatory, Lawn, House, Garden, Stock or any other purpose, WITHOUT EXPENSE OF TIME OR LABOR?

All of this can be accomplished by using the Improved RIDER OR ERICSSON **HOT-AIR PUMPING ENGINE**

Catalogue with full particulars, sent on application.

DE LAMATER IRON WORKS, 21 CORTLANDT ST., NEW YORK, N.Y.

ERICSSON

D. H. ROBERTS,

159 & 161 S. Fifth Ave., NEW YORK,

NATURAL GAS MADE GLASS

for ROSE HOUSES, CONSERVATORIES, Etc., Etc.

Our Glass received the Highest Award at the Boston Convention of the S. A. F

FIRST-CLASS CERTIFICATE OF MERIT.

PERFECT DRAINAGE **BENCH TILE** • Used by all the leading Growers and Horticultural Builders.

For testimonials, circulars, etc., address

W. P. WIGHT,

UPLAND GREENHOUSES, : : : MADISON, NEW JERSEY

GREENHOUSE HEATING

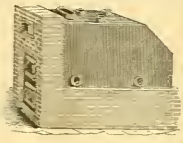
AND VENTILATING.

Superior Hot Water Boilers.

JOHN A. SCOLLAY,

74 & 76 Myrtle Ave., Brooklyn, N.Y.

Send for Catalogue.



GREEN-HOUSE HEATING.

MYERS & CO.

1518 & 1520 S. 8th St., PHILADELPHIA.

Send for catalogue and price list.

Mention American Florist.

Index to Advertisers.

Adv Rates, etc.....794
Anchorage Rose Co ..792
Asmus Ernst.....793
Baird Chas A.....795
Baller F A.....800
Barnard W W & Co....795
Bay State Hdw Co.....805
Bayersdorfer H & Co...794
Baylis Henry W.....795
Berger H H & Co. 797
Bock Wm A.....803
Bonsall Jos E & Son....795
Boston Letter Co. 805
Brague L B. 794
Brauer & Richter . .798
Brinton W P.....798
Burns & Raynor.....795
Burrow J G.....802
Burton John.....793 797
Carman R W. 800
Carmody J D.....808
Chandler Geo F 800
Chicago Cut Flower Ex 794
Chitty H E.....799
Clark B L 798
Cliffe David 793
Connelly John J 798
Corbrey T J & Co.....795
Curwen John Jr.....801
De Cock Jules 802
Deyline's Boiler Wks..805
De Lamater Iron Wks.805
De Witt Thomas.. ...799
Dillon J L.....804
Dorner Fred & Son....798
Dreer H A.....804
Elliott J Wilkinson....798
Elliott W H.....794
Ellison Wm.....794
Evans Charles F & Bro 793
Faust H G & Co 796
Felheim Lyman.....805
Field S B.....804
Gardiner J & Co.. ...791
Gibson J C.....797
Gonzalez & Co.....800
Hall Ass'n.....805
Hammond Benj.....808
Hancock Geo 795
Hansen Christ 802
Hart James.....795
Hart Michael A 795
Hartford H E 794
Heinl Jos.....804
Henderson John Co ..793
Herendeen Mfg Co ..807
Herr Albert M.....798
Hews A H & Co.....806
Hillinger Bros.....806
Hill E G & Co. 797
Hippard E 793 806
Hitchings & Co.....808
Hoffmeyer C K 804
Holmelide Greenh's 8.796
Hooker H M Co 808
Horan Edw C.....795
Horan James. 799
Horsford F H 804
Huebner H.....798
Hulsebosch Bros. 797
Hunt E H.... 795
Hunt M A.....793
Hunter & Purdy 795
Irvine John Co. 800
Jennings E B.....798
Joosten C H.....797
Kaufmann Ernst & Co.794
Kennicott Bros.....795
Koffman E 794
Kroeschell Bros 807
Kuehn C A.....794
Larkin Isaac.....798
La Roche & Stahl.....795
Lee W A 805
Lewis E B 798
Little M B 796
Lockland Lumber Co.. 807
Lombard R T 799
Long Dan'l B.....794
Lovett J T Co 805
McBride Alex 798
McCarthy N F & Co....795
McFarland J H.....807
McFarland J H Co.....796
McGowan John. 799
Manz J & Co.....808
Marschuetz & Co.....794
May John N 800
May L L & Co 793
Meehan F J & Son 795
Mendenhall R J.....800
Meyer John C & Co 805
Michel Plant & Bulb Co797
Millang Bros.....795
Moffatt G J.....795
Moninger Jno C.....808
Moon Samuel C.....804
Moore Frank A Co.....792
Myers & Co 807
Nace R E.....804
Nanz & Co 801
Nanz & Neuner.....793
National Fibre Co ...805
Nielson Hans 803
Niles Centre Floral Co 795
Nitterhouse Mrs S J...791
Olson M 795
Onwerkerk P.....804
Peck & Sutherland.....795
Peirce & Coleman Co 806
Pennock C L.....798
Pennock Sam'l S. 795
Pierson F R Co.... 801 805
Pillsbury I L.....800
Pittsburg Clay Mfg Co.806
Powell W S & Co.....797
Randall A L.....795
Renard Joseph.....799
Rinhand Benj.....797
Roberts D H.....807
Roehrs Theo.....795
Rogers Nurseries.....804
Rolker A & Sons 797
Russell Governor 793
Russell S J.....794
Salter Bros. 792
Salzer John A 797
Sander & Co.....802
Sanford H H.....792
Schneider C F.....803
Schulz Jacob.....792
Scollay John A 807
Scott Wm 802
Semple James 803
Sheimire W R 799
Sheridan W F.....795
Sherwood Hall Nur...802
Siebrecht & Wadley...802
Siefke Dopffel & Co....804
Situations, wants. ...791
Smith C A Floral Co...794
Smith Henry 803
Smith Nathan & Son...802
Spaulding T H.....804
Spooner Wm H.....793
Stark Bros 792 804
Starr Chas T.....795
Steffens N. 805
Storrs & Harrison Co 791 804
Stott Garden Imp Co .806
Strauss C & Co. 792
Struck J N & Bro .. .805
Styer J J 798
Sunderbruch H L 794
Swayne Edw 799
Swayne Wm.....799
Tricker Wm.....803
U S Wind Engine & Pump Co.....805
Vaughan J C 810
Vicks Sons James 796
Vose A V.....804
Vreeland A J 798
Waterbury Rubber Co.806
Watson H M.....797
Weeber & Don.....797
Welch Bros.....795
Wells & Coutan Co....806
Whilldin Pot Co.....806
Wight W P.....807
Wilks S Mfg Co.....807
Wisconsin Flower Ex..804
Wood Bros.....793

FAIRBURY, NEB. The Carpenter Nursery Co., building was recently destroyed by fire.

BENTON HARBOR, MICH. The State Horticultural Society met here, February 28 to March 2.

DENVER, COL. The Denver Florist and Fruit Co., is pronounced insolvent, and has made an assignment to Fred S. Roth.

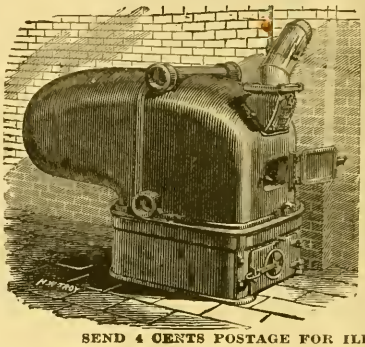
BAY CITY, MICH. The Horticultural Society will hold a meeting March 8 to make arrangements for their show next fall.

OAKLAND, CAL.—The Pacific Floral and Seed Co. has been incorporated here; capital stock $25,000, in 25,000 shares of $1 each. Directors: J. E. Depue, Isaiah Bray, W. W. Samuels, C. A. Smith and F. J. Brainerd.

NEWPORT, KY.—Mr. Chas. J. Jones, the florist, died here suddenly February 12 from neuralgia of the heart. Mr. Jones was 63 years of age and had been a resident of Newport for 30 years. He leaves a wife and five children.

GREENHOUSE HEATING AND VENTILATING

Horticultural Architecture and Building.



HITCHINGS & CO.

Established 1844.

233 Mercer St., New York.

FIVE PATTERNS OF BOILERS.

NINTEEN SIZES.

Perfect Sash Raising Apparatus.

Rosehouses, Greenhouses, Etc, of Iron Frame Construction, Erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frame Benches with the "Perfect Drainage Bench Tile" or Slate Top.

SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUE.

See what This man Says about it.

EVERY BODY TELLS ME,

AND NOW I TELL YOU

THE "NEW DEPARTURE"

Is the BEST and the Cheapest

Ventilating Appliance

That has ever been Introduced for FLORISTS' USE.

MACOMB, ILL., Feb. 21, 1893.

MR. J. D. CARMO[illegible] *Dear Sir;*

The vent[illegible] [illegible]zus received of [illegible] [illegible]ed putting up yesterday an[illegible] [illegible] fine—I don't know how [illegible] [illegible]d ask more—as it raises the wind[illegible] [illegible] 100-foot house easily and evenly. [illegible] [illegible]own a ventilating apparatus could be bou[illegible] [illegible]o little money I would have ordered [illegible] [illegible]e I built last year; and if I build another [illegible] [illegible] can count on an order.

[illegible] respectfully, I. L. PILLSBURY.

J. [illegible] MODY, - - Evansville, Indiana.

CYPRESS SCREEN HOUSE MATERIAL

[illegible]EAR

[illegible]PRESS

[illegible]ASH

[illegible]ARS

HOT BED AND VENTILATING SASH

[illegible] MONINGER,

297 Hawthorne Ave.,

CHICAGO, ILL.

M[illegible] American Florist.

CUTS!

Wood Engraving, Zinc Etching, Half-Tone, Wax Engraving, Photo-Engraving, Designing.

MANZ & CO.,

183 Monroe Street, CHICAGO. ENGRAVERS.

HAMMONDS GRAPE DUST KILLS MILDEW. TRADE MARK

Kills Mildew and Fungus Growth. What does? GRAPE DUST. Sold by Seedsmen.

You [illegible]nefit the American Florist b[illegible]tioning it every time you write an advertiser in these columns.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser in these columns.

THE AMERICAN FLORIST

A WEEKLY JOURNAL FOR THE TRADE

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, MARCH 16, 1893.** **No. 250**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company.
Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,

322 Dearborn Street, CHICAGO.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis, Mo., August 9 to 12, 1893.

CONTENTS.

Carnations—Seasonable hiuts 809
—Pot culture of carnations 809
—New carnations 810
—Carnation Jacquemiuot 810
Hypericum Moserianum (illus) 811
Miscellaneous seasonable hiuts 811
A simple botanical classification 812
Pyrethrum uliginosum (illus) 812
Chicago 812
St. Louis 813
New York 814
Boston 814
Philadelphia 815
Washington 815
Baltimore 816
House of primulas (illus) 817
Stoppage in transitu 817
Sunset and Hoste 817
News notes 818
Catalogues received 820
The seed trade 824
Chrysanthemum nomenclature 826
Easter lilies from Bermuda 828
Toronto 830
Worcester, Mass. 832
Foreign notes 832
Substitutes for glass in greenhouse roofs . . . 834

Indianapolis.

At the last meeting of the club Mr. John Hartje reported that as the American Carnation Society having decided to meet at Indianapolis next season, ways and means for caring for the members should be provided, and after several recommendations it was made the special business for next meeting.

The executive committee of the Indiana Horticultural Society decided to accept the invitation of our state society exhibition committee to hold a fruit exhibit at the same time in connection with the chrysanthemum show. A premium list amounting to $250 was set aside for that purpose. W. B.

PLEASE WRITE on your printed letter head when addressing our advertisers. If you have no printed letter head, then enclose your business card or bill head.

DO YOU WANT a list of the leading cemetery superintendents? You will find such a list in our new trade directory and reference book.

Seasonable Hints.

Smilax may be grown very successfully among carnations, planting a root every second or third row along the south side of walks, short sticks with notches can be run in the ground and the string run from them to the sash bars. A year ago we grew quite a good crop of smilax in this way. Having the plants we set them in the manner described and they interfered in no way with the carnation plants. We have also seen smilax grown on the north side of walks along the edge of the benches. In this case it was allowed to hang over and was used for cutting bouquet green etc. Where smilax is grown care must be taken to syringe it before fumigating. Indeed it is the safest plan to always syringe everything lightly before smoking the houses.

We grow regularly Easter lilies, both Harrisii and longiflorums, among our carnations. They are little trouble and expense and the bulbs last several seasons if properly cared for. New bulbs however are always to be preferred and these of the smaller sizes as our object is to have as many long stemmed blooms as possible. The larger bulbs are better perhaps for pot plants but make too many short stems for cutting. Starting with the new bulbs in September or October we put them in 6-inch pots (five would be better) one to three to a pot according to size. In potting we use good potting earth and place a small handful of sand under each bulb to prevent rotting. The pots are placed under a cool bench in the greenhouse and as the stems push up are removed to the benches. They are set in every other row of carnations along the south side of walk and one plant in from edge. The pots are plunged in these places by removing some of the soil. Little else is required excepting to stake the flower stalks when tall enough and to see that they do not become too dry. The buds form a good lodging place for green fly and particular attention must be given to fumigating the houses when they are growing. The aphis greatly injure the flowers. The lilies may be marketed along as they open, but if wanted for Easter or any special occasion the pots can be removed to a cool cellar. The flowers will thus keep for two weeks or more and be all the better for shipping purposes as they become much firmer in texture.

There may be many other plants that could be grown with carnations but we have mentioned the principal ones that with judgement and proper care may be profitably raised as accessory crops. Adding a little to our cares perhaps but also very considerably to the income from a given area of glass. W. R. SHELMIRE.

Avondale, Pa.

Pot Culture of Carnation Plants.

BY J. WM. COLFLESH, PHILADELPHIA.

[*Read before the American Carnation Society at the Pittsburg Meeting.*]

It is with some misgivings that I offer this paper on pot culture of the carnation as I have many times heard it remarked in our city of "Brotherly Love" that if you wanted to learn anything about carnations, you should visit the carnation belt, situated in the southeast corner, Chester County, Pennsylvania. But as some carnations, as well as other good things have come from Darby Road, Philadelphia, I will venture to make a few remarks on pot culture of carnation plants.

To undertake to grow carnation plants in pots the entire season for cutting flowers from, with or without the intention of planting on benches in autumn, and with the expectation of having plants equally as large and fine as they that have been planted in open ground, will cause extra expense, and the greater portion of plants will be very inferior to those coming from open ground in most localities of this section of the country. However, as there are some kinds that do so well planted out, owing to the severe climatic changes of intense heat, drought and wet spells of weather, this mode of culture may be resorted to, with some extra labor and expense in growing of plants and probably better results after they are planted on benches, as by being taken from pots you are sure of saving all roots of these varieties. Or probably the better way to grow Buttercup and some other kinds, would be to grow them on benches in houses during the summer, as it has been proven of late years that the best results can be obtained by growing chrysanthemums in houses during summer.

To lift carnation plants from open ground and pot them in autumn with intentions of growing them for cut flowers during winter and spring months, I think will not prove as profitable as planting them on benches or solid beds. Therefore their use will be for decorative purposes, and to get plants large enough for decorative purposes it will be necessary that the plants be grown out in the field during summer. Carnation plants, well flowered, with fine foliage, neatly staked, pot and plant comparing favorably, are very pretty, lasting and useful plants for decorative purposes. Although it seems to be generally conceded among growers that they are not so pretty financially, yet when we consider the vast improvement in varieties and the favor with

which the cut flowers are received, I see no reason why pot plants should not become more popular, as these in variety of color are certainly the most satisfactory plants for pulling flowers from for the amateur's conservatory, as they will stand better than most other flowering plants, the alternate neglect and overcare of these places. When the conservatory consists only of a sunny window, few plants will give better satisfaction than these.

For very large decorations as a rule these plants are rather small, the average plant being about large enough for a six inch pot. But for medium or small decorations of flowering and foliage plants, they are just what are wanted, and I am sure compare favorably with most other small or medium sized flowering plants ranking second as they do in the flowering plants we cultivate. To grow plants for pots for decorative purposes, it will be best to take kinds that are of good, compact habit, such as Century, Philadelphia, Peter Henderson, Tidal Wave, Robert Craig, Sunrise, Quaker City, Buttercup, American Flag, etc. Lizzie McGowan, although not one of the strongest growth is fine for pots as well as for benches. Such kinds as Grace Wilder, Mrs. Carnegie and Chester Pride etc., do not do so well in pots. The first named kinds with many others of later introduction with ordinary handling will make a fine showing of flowers at one time, which is certainly necessary for decorations.

In the propagation of these plants for either pots or to cut flowers from, I take cuttings from only the most healthy, most double, and bearing flowers brightest in color of their kinds. I do not take the topmost shoots, as it is necessary to leave these on plants to insure a continuation of flowers. Neither do I take the lowermost shoots as these are harder and often not so healthy, the preference being for rather soft free growing wood, this usually being the condition of the wood a few inches above the base of the plant. With some kinds we just pull the cuttings and put them in sand; with others of more compact growth we use a knife. First pull off the leaves on opposite sides of the stem, thereby making the cutting rough around the joint, make a clean cut with a knife about 1-16 of an inch below the joint and a callous will form and the cutting will root much sooner than if the ends of the leaves have been left on the cutting. These cuttings are put in a sand bed which has been firmly pressed or packed with some hard substance, such as a brick or a piece of hard new wood, and the sand pressed firmly around each cutting. They are thoroughly watered once and sprinkled on all clear and bright days. These cuttings will be well rooted in from 35 to 40 days if temperature has been from 45° to 50° top heat, with bottom heat 60°, when they should be potted into small pots or planted in shallow boxes and placed in a house in a temperature of 60° for three weeks, when the temperature should be lowered and plenty of air given on all clear and warm days.

The soil in the field should be of a mellow, rich and fibrous order, with a sprinkling of air slacked lime, plowed or spaded to a depth of at least six inches, thoroughly pulverized, and made in slightly raised beds to insure good drainage in case of continued wet weather, for should a warm sun make its appearance after a heavy shower of rain and plants are standing in water it will certainly kill or greatly injure them. I set the plants about eight inches apart in rows by 15 to 18 the opposite way, firmly pressing the soil at time of planting and cultivate between the plants after every rain, or as soon as the soil will permit. Hand hoe every three weeks until the middle of July, when less hoeing will do, as about this time we generally have some very dry hot weather, and so much cultivating is likely to lay bare a great many working roots, and their exposure to the dry air and hot sun I think is injurious.

Top plants as they require it, going over them every ten days, breaking off all tall growing shoots until July 20th, when you should not top the largest and most even growing plants, as there is usually a scarcity of good flowering plants during the latter part of September and October. Plants that have not been topped after 20th of July will be well set with buds by the beginning of September. These plants should be carefully lifted, potted, staked and plunged in a frame out of doors in refuse hops, leaves or other matter, well watered, partially shaded and syringed several times on all clear days, and by September 20th they will be in flower and will find ready sale until the Queen of Autumn makes her debut, which as you all know makes even the rose as well as all others wall flowers for the time being.

Where a continuous supply of plants is wanted after the chrysanthemum has departed, for Christmas and thereafter, plants should be topped as late as September 20th, then lifted, potted and plunged in deep frames out of doors by October 10th, and watered and syringed on all clear and warm days. The soil should be about the same as mentioned for field growing with an addition of sand and bone meal. Old soil from rose houses after having laid out over winter, with some bone, sand and air slacked lime mixed with it, is also good for either pot or bench culture.

About November 1st to 10th a goodly portion of these late topped plants will have made a fair growth if they have been properly protected with sash, and should be removed to house with a night temperature of 50° to 55° and day 65° to 70°. Some of them will be in flower and will find ready sale during the holidays. For a continuous supply thereafter bring in the most forward plants every two weeks proportionate to stock to draw from, until January 1st, when all should be removed to house except what may be required for spring sales. These should be protected with double sash and covered during very cold weather with mats of straw or other material, and will sell readily during the month of May for bedding purposes.

New Carnations.

The past two years have been the most prolific in the production of new varieties of any in the history of the carnation. They are springing up on all sides, and the number of growers who are trying their hand at fertilization and crossing is almost innumerable. One very good feature about our new sorts is that they are nearly all, in fact I might say all, products of American growers and American soil. They are already acclimated and at home in most growers' green houses, ready to go ahead and do their best if there is any best in them. To find out whether there is any best in them is quite a problem with cut flower growers, there are so many put on the market annually that to get them all is quite an item in the expense account, and yet to miss one that becomes popular is a misfortune. I have for the past few years been devoting a house to the trial of new sorts, and it reminds me more of a grave-yard than anything else; there are so many hopes and great expectations buried in it. There is, however, an occasional one that is so much an improvement over the older sorts that it more than pays the loss on the others to find it out.

For the purpose of finding these good ones out with less expense to the general grower would it not be well for our Carnation Society to select a good grower in each of the following localities: Pennsylvania, New Jersey or Long Island, Massachusetts and the vicinity of Chicago; let each of these growers get, say twenty-five each of the new sorts offered annually, plant them side by side in the same house, and report both their good and their bad points, either at our annual meeting, or through the columns of the FLORIST. By a comparison of these reports, growers could form some idea as to what will do well with them and suit their trade. They would thus become good purchasers of good varieties and leave the poor ones alone, a state of affairs to be devoutly wished for, as there is nothing injures the trade so much as the wide dissemination of an inferior sort. I am willing to purchase the plants, use one or two houses to grow them in and report, without any expense to the society, providing a grower can be found in each of the other localities named to do the same. If money is needed will also contribute twenty-five or fifty dollars for this purpose.

It might be suggested why not leave the various growers to give a report, but this has been found by experience impracticable; you can only get a report from parties appointed for the purpose, and sometimes not from them. Aside from this if they are all under the care and culture of one man, they will be more closely observed and their good features brought out more fully. Another important committee would be to appoint a prominent store man in each of the following cities: Chicago, New York, Boston and Philadelphia to report on the selling merits of the carnations on trial by the growers named, as it is really in the store that the final decision comes; if they are no good there they are no good in the growers' houses. A general expression of opinion on these points from the various growers and store men will get them into working shape, and every one will acknowledge that there is a necessity for action of some kind to keep the carnation trade in a good healthy condition. Carnations are in the ascendency now, let us keep them going up the ladder toward Thorpe's Star.

A. M. HERR.

CARNATION JACQUEMINOT is a new variety originating with P. Fisher & Co., Ellis, Mass., which was recently certificated by the Mass. Hort. Society. Some blooms sent to us showed it to be a rich bright crimson, like a Jacqueminot rose; the calyx long and perfect, and fine stems. It appears to be a very fine keeper; the blooms were in perfect condition when received and lasted admirably afterwards—better than the generality of crimsons. The growers tell us it is very free blooming, and it appears to make perfect stems without disbudding.

IF YOU wish to make sure that your spring trade list will be preserved by those who receive it, print it in the American Florist.

HYPERICUM MOSERIANUM.

Hypericum Moserianum.

We present herewith an excellent illustration of this new hypericum, which is considered an important addition to our list of hardy plants. It has large golden yellow flowers and is a free bloomer.

Miscellaneous Seasonable Hints.

Gloxinia bulbs should now be started. They will then be in flower from July 1st, on and then is when they sell best, because there are few other good house plants for the retailer to handle during July and August, and they are with scarcely an exception the best flowering plant for dwelling house that I know of. Some four months ago I wrote for the FLORIST my method of growing the gloxinia. I will now briefly repeat that I start them in 3-inch and larger bulbs in 4-inch pots. Let the top of bulb be even with surface of soil, place in night temperature of 55° to 60°, water at planting and after that little water is needed till they have made leaves. When the leaves have covered the width of pot or a little beyond it shift into the flowering pot, which with me is a 5-inch, and stronger plants in 6-inch. One-third of the pot should be filled with broken charcoal and a piece of green moss. The soil should be two-thirds light loam and one-third well rotted manure with some sand added, or genuine leaf mould will do instead of manure. Never syringe gloxinias and when watering wet the leaves as little as possible. They require shade at all periods of their growth but not too dense and when in flower must never be allowed to wilt for want of water; if they do the flowers will never recover.

I treat tuberous begonias in exactly the same way as to starting, temperature, etc., but many of the begonias are now sold for bedding, filling vases, etc., and these are of course sold from the 4-inch pots. A handsome pot for a veranda is half a dozen plants of tuberous begonias in a 15-inch jar. They do well all summer. There is one difference between the gloxinia and the begonia. The latter is a much heavier feeder and will take much more manure.

If you are a grower of general stock, bedding plants, etc., you will be bound to need more room in April and May for your rapidly increasing stock than you needed up till now. So you have to make hot beds to hold the overflow. It is time to prepare for them. If you have the opportunity to procure fresh spent hops from a brewery and mix half and half with straw stable manure, your hot bed will last better than with manure alone; and the remains of this mixture when thoroughly decomposed is a most invaluable ingredient for your potting soil. Not only will you need more room, but there are many bedding plants that can be grown so much easier and better in a hot bed. As a rule the plants that are grown for their foliage are those best suited to a hot bed. Here are some that I always put there about the first of April. Mt. of Snow and other variegated and bronze geraniums, rose geranium, Centaurea gymnocarpa and candida, achyranthes in variety, Santolina incana and a little later coleus of all varieties. Above all plants that luxuriate in the warm ammonia charged atmosphere of a hot bed are the different varieties of alternanthera. In fact, the best variety of these, paronychoides major, cannot be satisfactorily grown without the aid of a good strong hotbed. Among flowering bedding plants that I put there are verbenas, lobelia, sweet alyssum and petunias. I put three inches of old soil on top of the manure and plunge the pots to the rim, and if watering is not neglected no shading is needed. Another great advantage in having bedding plants in a hotbed early in May the sash can be removed and the plants hardened off well before planting out time.

If your cinerarias and calceolarias are troubled with green fly, which the latter is sure to be, and they don't like a heavy dose of tobacco smoke either, stand over your plants and between every row of plants place two or three inches of loose tobacco stems. It will help greatly to keep down the aphis.

An inquiry received is, "what proportion to use kerosene to kill mealy bugs on coleus and not injure the foliage." I have used it as follows with good results without injury to the foliage: One-half pint of kerosene to one pint milk, mix thoroughly; it will take half an hour's lively stirring to do it; then pour the mixture in a common sized pail of water and apply with a syringe. It is well to have a cheap helper to keep the whole lot

stirred. It is sure death to bugs, turning them to a rich Ethiopian tint. Don't use t on any plants from which you are picking flowers, for the odor lasts for weeks.

Buffalo, March 13. WM. SCOTT.

A Simple Botanical Classification.

The primary idea of a garden is to display plants—trees, shrubs or plants of more humble growth, in such manner that they will attain their greatest and best development, and if possible arrange them as a harmonious and pleasing whole—a gem in the landscape. This can never be done without considerable definite knowledge of the individuals composing the vegetable kingdom.

Now, the science of botany has been devised to aid that knowledge, and all the botanists—above the rank of herbalists, have adopted some classifications.

Without classification the human mind would be utterly unable to grasp the vast multitude of natural objects—whether plants, or other bodies. The botanical schools vary greatly—there are those who attempt no classification whatever, there are those who attempt a little, and there are those who attempt vastly too much. The gardener, the florist, and the great public reject them all. They are cumbered with too many terms; they vary too much; life is too short to fool with them, and the botanist knows it. Then what is to be done to give a comprehensive idea of the vast amount of material available in nurseries—but seldom called for? It is now selected—often in a hurry, often for its cheapness, always for its supposed adaptability—but the mind is always embarrassed by the multitude of material, presented in a perfect maze of straight rowed miscellany.

There is not a garden in the country—and but few in the world—where analagous plants can be compared without a great deal of physical waste, and loss of time. Botanists, scientists as they undoubtedly are, have chiefly confined themselves to arranging sheets of paper, with portions of plants glued upon them. Herbarium sheets are convenient, but perfect flowering plants are object lessons infinitely superior. If they could be arranged with as much convenience and sequence as the herbarium, would they not facilitate exact knowledge? Given a garden it is easy, and as a matter of fact some of the great nurseries unconsciously come near to classifying the larger series, such as conifers and bulbs and grasses.

Let us suppose a nursery:

A. Are mostly all plants with two seed lobes, and they build up their annual wood outside. They can easily be determined.

B. Are all or nearly all plants with a single seed lobe, and their stems are vessels vertically arranged.

C. Are plants without true seeds or seed lobes; they are ferns and their allies, and equisetums.

All the trees and shrubs, and most of the herbaceous plants belong to section A. Botanists divide it into four parts:

A. I. Are plants with many petals, magnolia, geranium, and roses.

II. Are plants with their petals joined into one, forming a cup or tube, honeysuckle, heather, gentian.

III. Are plants without conspicuous petaloid organs, altenanthera, polygonium, willow, oak.

IV. Are trees or shrubs with what botanists term naked seeds, but what gardeners know as conifers, larch, baldcypress, ginko, or salisburia, etc.

These four sections exactly represent the modern botanical division of these important plants, and no nurseryman need be told how it would help him to grow them together, for purposes of reference, exhibition to customers of some knowledge, or for his own catalogueing and handling. Those who know how, can easily arrange a moderate sized nursery into four or five divisions, and they will as surely know their plants better than their neighbors, as light will follow darkness.

B. Contains the plants we speak of as bulbous, and the palms, yuccas, grasses, etc. They also are divided into series, of which irises, lilies and grasses are representative.

C. Then there are a few hardy ferns.

This is all that a nurseryman or florist need do to make his collection "go" with modern botanical science, and earn the character of "public benefactor" when a scientist visits him on a very warm day.

It is even easier than this to arrange all the trees and shrubs ornamentally, for me at all events, for there is no tying down to the straight-row in the ornamental garden, and my earliest recollection always travels back to a certain terrace window, a mass of Gentiana acaulis, and a run over the green slope between. There were shrubs and trees behind that bed of gentians; rhododendrons, arbutus, lilacs, with primroses and phlox between, and ash trees beyond; a group which I was taught early to observe had all tubular flowers.

JAMES MACPHERSON.

Pyrethrum Uliginosum.

This giant daisy is a very useful thing for the hardy garden; it is a tall grower, flowering abundantly in the fall. In appearance the blooms resemble the Marguerite or Paris daisy, and although it could hardly be expected to prove specially remunerative for the wholesale market there is no doubt that it would be very convenient to cut for a general retail trade. It is an excellent addition to an herbaceous garden.

Chicago.

The special feature at the last meeting of the Florist Club was the display of carnations and discussions on same. One of the long tables in the Exchange was completely covered with handsome specimens of carnation blooms, tastefully displayed in vases, and the exhibit was a very instructive one. In addition to vases of fine blooms of the standard varieties there were quite a number of the newer sorts as well as some unnamed seedlings from some of the local growers. In the collection of seedlings displayed by Mr. N. Singler were several that gave promise of being useful sorts. Silver Spray was unquestionably the best white shown, none of the other whites approaching it in excellence. Lamborn as grown around Chicago is sadly lacking in substance, and Lizzie McGowan does not show up here nearly as well as it does in the east, but Silver Spray can always be counted upon for a good flower. Garfield, the standard red around Chicago, was shown in fine form and color. But this variety is late, and early in the season there is a scarcity of good red carnations in this market. Some very good flowers of Buttercup were shown by Mr. Singler, but he said that he could not grow such blooms for less than $5 a hundred and make a profit. A large collection of blooms of the newer sorts was sent by Mr. Geo. Hancock, Grand Haven, Mich., and they attracted a great deal of attention. But one of the most effective displays was a large vase of handsome blooms of the variety known around Chicago as Anthony's Pink, said by some to be synonymous with Chas. Sumner, but held by others to be quite distinct from that variety. In addition to the carnations a very handsome specimen azalea was shown by Mr. Anton Then. It was magnificently bloomed and very symmetrical. This handsome plant formed an excellent center-piece on the table and was surrounded by the display of carnations.

At the meeting proper three new members were added to the list, and in the discussion upon carnations Mr. Anthony gave an interesting account of what he had seen at the Pittsburg meeting of the American Carnation Society. He gave a very humorous account of his experience in visiting the various establishments in Pittsburg where carnations were grown, stating that wherever carnations did not do well the invariable statement of the grower in explanation was that there was an adjoining factory, and the smoke from its chimneys passed directly over his greenhouses. He found only one grower who was not in close proximity to such a factory, and at this establishment the carnations were very fine, and the owner of the place admitted very frankly that the smoke did not drift in his direction.

In speaking of the display of blooms at Pittsburg, Mr. Anthony made special note of the fact that of the two displays of Edna Craig carnation, of which one was grown by Mr. Robt. Craig and the other by E. G. Hill & Co., those shown by Mr. Craig kept in perfect condition for 36 hours, while those shown by Mr. Hill dropped their heads in a very short time. As each of these exhibits had travelled about an equal distance he thought it fair to assume that there was something in the soil in which the carnations were grown by Mr. Craig, that the soil used by Mr. Hill did not possess, and which was necessary in order to give this variety sufficient substance to make it last well.

Referring to the experience of Mr. Saxon in using the two different kinds of soil for his carnations as noted in the last issue of the FLORIST, Mr. Hopkinson, foreman for Mr. D. B. Fuller, whose establishment is also at Downer's Grove, said that he had a similar experience with the two kinds of soil noted.

Referring to the matter of novelties there was an interesting passage-at-arms between Mr. Frank Leslie and Mr. Jno. Weston. Mr. Weston had expressed a great deal of confidence in the future of Fred Dorner as a scarlet carnation, and Mr. Leslie asked him a number of very pointed questions about it. The dialogue was about as follows: Mr. Leslie:—"Have the Fred Dorner carnations that you have grown the past season compared favorably with the bench of Tidal Waves that stood along side of it?" Mr. Weston:—"No, they have not come up to the Tidal Wave, but of course this is a new variety and you know they always over-propagate the new sorts and weaken the constitution of the plants, and it is not fair to make a comparison of that kind yet; another year will tell that story." Mr. Leslie:—"But did not your Tidal Waves show up to just as good advantage the first year you had them as they do now?" Mr. Weston:—"Yes, I know they did, but we had much better plants of Tidal Wave than we had of

PYRETHRUM ULIGINOSUM.

Fred Dorner." Mr. Leslie:—"Yes, and you had a better variety, too."

Mr. Benthey spoke upon the subject from the retailer's standpoint and urged the growers to supply a larger variety as well as better quality of blooms. He made mention of the poor quality of Wilder the past season and of the necessity of the growers trying some of the new pink sorts now on the market. He also noted an insufficient supply of good red sorts.

Mr. Sanders presented the club with several books, and as no bookcase had yet been provided for what the club already had a committee was instructed to secure a suitable case.

At the next meeting a lunch will be served in accordance with the program recently adopted, to have such an affair at every other meeting.

Mr. Thomas Hopkinson has taken unto himself a partner, and congratulations are in order.

Mr. W. A. Viberts, for many years with Mr. J. T. Anthony, is now with Mr. R. J. Mendenhall, at Minneapolis.

Mr. Frank Leslie is now in charge of Mr. O. P. Bassett's place at Hinsdale.

There is now an excellent display of cinerarias at the Lincoln Park greenhouses, and among the orchids in bloom is a specimen of Cœlogyne cristata which is a mass of flowers, and which would be hard to beat. The plants in the palm house are growing rapidly and a few weeks has made a marked change in its appearance.

The flower trade still keeps good for the season; some days are duller than others, but dealers are not generally inclined to complain. Bulb stock is extremely plentiful, and much of it goes slowly, excepting freesia and valley. There has not been a great quantity of freesia at any time this season, and the entire stock sells. Valley was less in quantity for a few days, but the stock has now increased. Daffodils are very plentiful, but sell quite well; Harrisii and tulips are almost a glut. Violets are in very good demand, but there is a greater quantity coming in.

Among roses some good Brunners are now coming in from local growers, also Neyrons and a very few Rothschild. Extra good Brunners from outside sources sell for $4 a dozen. Roses generally sell very well. Perles are quite plentiful and generally very good, and there is an improvement in the quality of Mermets and La France. A few Wabans were noted, but this does not seem to become an established favorite.

I. Allegretti is receiving shipments of acacia from California and promises a large quantity for Easter. It appears to be grown very sparingly here, though much esteemed for decorative work in many localities.

T. J. Corbrey & Co. have altered their location in the Exchange and very largely increased their space.

St. Louis.

Trade during the past week has been rather slow. Lent seems to have sent a great many of the regular flower buyers to the various health resorts south of us. The shipping trade to these points has improved, but does not call for the same quantity of stock.

The regular monthly meeting of the Florists' Club was held Thursday, the 9th. The recommendations of the exhibition committee regarding the holding of the fall show were all accepted with but one exception, this related to the removing of exhibits after the close of the show; they recommended that all exhibits should remain undisturbed until the morning following the closing day of the show; this developed the fact that many who had small exhibits would rather remove them the evening before and not be forced to make a long trip to get them the next day with the probability of their then being useless; this refers more particularly to cut flowers than it does to plants, as those staged during the last days could often be used to advantage.

It was also decided to make an attempt at giving a "festive appearance" as one member put it to the exhibition by decorating the interior as well as the exterior entrance to the building, thus indicating that something attractive was being held inside, the use of bunting and evergreens it was held would be much more effective than any amount of canvas signs and so forth.

The report of the committee relative to the entertainment of the S. A. F. in August was adopted and committees appointed to take charge of the various branches of work. A vote of thanks was also tendered the American Florist Co. for a lithograph of the Horticultural Building at the World's Fair, and the secretary

was instructed to have the same framed and hung.

The C. Young & Sons Co. have just finished placing a large size Worthington Duplex Pump. This enables them to force the water into the mains and maintain any pressure there they may require, it often being the case that when many are using water at the same time a tank pressure, either owing to too low an elevation or to small size mains, does not give the desired force; by the use of a pump, however, this is all overcome and a stream strong enough to make "red spider" scarce is easily developed. The same pump is also connected to a manure water cistern, from which the manure water is drawn and forced wherever needed on the place, this being a long way ahead of the old barrel system.

The firm of Thompson, Anderson & Kennedy, who make a specialty of "horticultural building," have recently greatly improved their shop, having placed a 7½ horse power electrical motor and a full line of wood working machinery as well as a drill for iron work.

It is with sadness that we learn of the oss to Mr. John Armsby (who is gardener to Mr. Kaufman, and of whose skill we spoke in our last letter) of his little daughter who died after an illness lasting but 17 hours, from diptheria.

R. F. T.

New York.

The quantity of flowers coming to the city at present is very large, and includes about everything that can be called for. Prices are but nominal, the main object with the wholesalers being to sell the stock. The price is a secondary consideration. One wholesaler, of philosophic turn of mind, said in reply to an enquiry about the low prices: "Yes, prices are away down, but we hear little grumbling from the growers. The fact is they are better satisfied with 2 cents for their roses just now than they will be with 10 cents at Easter.

It looks as though a yard stick might soon become an essential item in the equipment of a New York wholesale dealer, and perhaps the public sealer of weights and measures may yet be required to extend his jurisdiction over these necessary articles. The following is a literal copy of an invoice of American Beauty roses as sent in by a grower, and will give some idea of the absurd extent to which the measurement craze is carried:

14	Beauties	extra long.
1	"	24 inch.
13	"	22 "
4	"	20 "
4	"	18 "
11	"	16 "
6	"	14 "
10	"	13 "
9	"	12 "
72		

Carnations are still abundant but not quite equal in quality to those coming in earlier in the season. Grace Wilder continues to be the leading variety as to quantity. Salmon Queen which Mr. Ernst Asmus controls exclusively and which received a somewhat chilly reception at the beginning has not only improved greatly in quality but seems to have attained much popularity, and is now one of the varieties most in demand.

Mme. Hoste, in the hands of some of the large growers is showing a peculiar tendency to become single and turn dark in color. They come frequently of a shade of color similar to LaFrance, and in such cases are found to contain but two rows of petals. The wood producing these buds is apparently vigorous and healthy in every respect.

Ernst Asmus will be the host at the next Florist Club Smoker. The organization of a hat insurance company for the benefit of gentlemen attending these "Smokers," has been proposed. Tall hats will be classed as "extra hazardous" and soft hats will enjoy low rates, as "A. A. Preferred."

The essayist at the meeting of the Florist's Club on Monday, March 13 was Mr. A. David Rose, the subject being "Chrysanthemums."

Mr. Rose said that his interest was first aroused in a visit to Uncle John in 1883. He was especially interested in a lot of seedlings which he saw there and from that moment began to devote his attention to them. Speaking of soil he said that chrysanthemums required good soil such as is suitable for roses, only a little older for specimen pot plants. The proper time to make cuttings was early as possible in January. He advised great care in watering and gave particular recommendation in culture to sweet soil, small pots and frequent shifts. Chrysanthemums are great feeders and require the best of food given in small doses and often. Manure water should be given frequently but not too strong and slight shading of plants from the strong sun's rays should be observed.

As to varieties he recommended taking up new and improved sorts in preference to too many of the older varieties. For plants on bench, cuttings should be taken at any time from April till July, very early plants being undesirable. A space of not less than a foot apart should be given but for little plants less room is required than for those early struck. In all cases close attention to details is absolutely necessary for success. Give fresh air and plenty of it, avoid close stuffy atmosphere at all times, even if temperature runs as low as 45° at night provided there is no moisture in the atmosphere.

The discussion afterwards was participated in by Messrs. Dailledonze, Asmus and others, Mr. Asmus disclaiming all knowledge of growing prize winners amid much merriment. A vote of thanks was tendered the essayist.

Previous to the reading of the essay considerable miscellaneous business was transacted. The committee on rooms was given another month's time and a new chairman in the person of Alexander S. Burns. The committee on a club emblem, represented by Mr. Dorr, was also given another month after an animated discussion on the merit of golden rod, roses, etc. Mr. Ward reported for the library committee that the $500 required for a beginning was nearly all secured and solicited donations of horticultural books from members. Mr. Morris reported for the Madison Square Exhibition Committee that schedules of premiums offered would be ready for distribution in a few days. Secretary Young announced that Mr. McCrowe had been accepted by the committee of the Garden Company as manager in place of Mr. Plumb, resigned, and had already assumed his duties.

A letter was received from the New York Press Club announcing the proposed fair to be held at Grand Central Palace in aid of their building and charity fund and requesting the appointment of a committee of co-operation to join with other organizations in helping to make the fair a success, and pledging the cordial support of the press in the club's interest. President Manda heartily approved of the plan and introduced vice-president Hennessey of the Press Club who made a statement as to the objects and charitable work of that organization. According to plans the fair will be a most stupendous and marvelous undertaking. No one could make a more eloquent or telling appeal for a worthy object than did Mr. Hennessey and he was applauded to the echo. Messrs. Morris, Taylor, Asmus, and others heartily endorsed the remarks of Mr. Hennessey and on motion a committee consisting of Messrs. Taylor, O'Mara, Dean, Forsterman, and Siebrecht was appointed to represent the Florist Club in the preparations. The fair will be held in May. Permission was granted to Mr. Dean to take the Club banner to Chicago in connection with the Club's exhibit in the Horticultural Department.

Among the visitors present were J. C. Vaughan of Chicago and Avery Gallup of Denver, both of whom were called upon and responded with a few remarks. It was announced that the Asmus smoker would occur on March 25, and that the Union Square flower market would if weather permitted be opened March 28.

The meeting was the largest ever seen in the Club room and fourteen new members were admitted.

Boston.

During his recent visit to Japan, Professor Sargent sent home to the Arnold Arboretum a great many seeds, numbering several hundred species and varieties of trees and shrubs. These include pines, birches, oaks, chestnuts, magnolias, rhododendrons, andromedas, actinidias, hydrangeas, hypericums, Rosa multiflora in several forms, etc., all more or less rare and novel here, and some not yet classified anywhere.

The hardiness of many of these remains to be proved, but it is confidently expected that out of the collection many valuable additions to our list of hardy ornamental shrubs will be secured.

The seeds are all sown in boxes and pots, and some will probably take a year or two to germinate, but there are already 121 varieties up, inside of three months of the sowing. Mr. Dawson sows all of the finest seeds, such as rhododendrons, andromedas and hydrangeas on sphagnum instead of soil. In some cases he has sown the same varieties in both ways, the result being in every instance greatly in favor of the moss.

Flower pots are half filled with drainage, over this is put an inch of soil, and then the sphagnum is placed on top and the seeds sown on it. The advantages are many. A light sprinkling will keep the moss sufficiently moist without being too wet, and in dark damp weather there is no danger of sour soil or damping off. In the case of seeds of slow germination the surface of the soil is apt to get badly caked over with a growth of algæ. This is entirely avoided by using the moss. Transplanting is done with a pair of small wooden pincers, by means of which the tiniest seedlings are pulled out of the moss without injury to the roots or disturbance of other seeds not yet sprouted, to be then dibbled into flats. Already ten thousand young rhododendrons have been so transplanted. Among these are some new R. indicums which may possibly prove hardy here.

At the Gardeners' and Florists' Club meeting on March 7, a communication was received from the Philadelphia Flor

ists' Club inviting the officers and members to attend the annual banquet of that club on Monday evening, 22d inst., a unanimous vote of thanks was passed. The diagrams used by Prof. Watson to illustrate his lecture on Old Fashioned Gardens, were drawn by young Mr. Dawson.

On March 9 a small party visited the establishment of E. Sheppard & Son, at Lowell, and were welcomed with Mr. Sheppard's customary hospitality. They found much in the greenhouses to admire, especially the dendrobiums for which this place has always been famed. Several fine forms of D. nobile are in perfection just at present. Something seldom seen nowadays was a bench of show pelargoniums, magnificent plants. Cinerarias are also looking well, and a house of Gontier roses was pronounced equal to the best ever seen.

Magna Chartas at the Waban Rose Conservatories are in very fine shape now; and a big crop of Jacqs is just coming in. Several new hybrid roses which Mr. Montgomery has tested in limited quantity this year are giving great satisfaction and will be extensively grown hereafter.

On the night of March 8 the greenhouses at Cedar Grove Cemetery were totally destroyed by fire. The news was received with unconcealed satisfaction by several of the commercial florists in that section, who regard the sale of plants at cut rates by such a corporation as an outrage upon their business.

The subject for discussion at Horticultural Hall on March 11 was "Aquatic Plants." An interesting paper prepared by L. W. Goodell, was read by Secretary Manning, the essayist having been delayed on the railroad. A pretty display of hybrid roses and other flowers was made by James Comley. The next essay will be by J. G. Barker, Superintendent of Forest Hills Cemetery, the subject being "Tuberous Rooted Begonias."

Gustav Weick, foreman for Judge C. W. Hoitt, Nashua, formerly with C. F. Evans, Phila., and later with Pitcher & Manda, died at Nashua on March 8, of typhoid pneumonia. He was a native of Sweden.

Wm. Edgar will invite his friends to a "Smoker" at his green houses at Waverly on March 23.

C. J. Power, of South Framingham is confined to his home by serious illness.

Cut flower trade still very dull and prices away down.

Philadelphia.

The March meeting of the Florist Club last Tuesday evening was well attended, many members being attracted in expectation of hearing George Anderson's paper on forcing of early hybrids. But they were disappointed. George says he can grow hybrids with reasonable success, but he can not write papers, it is not in his line.

In order to make it interesting a question box was opened and proved very interesting.

The first question, the best way to germinate canna seed, was answered by Mr. Lonsdale, who said the way was to soak seed in hot water for 36 hours, but filing the seed a little on one side he thought fully as good. Another plan was to hold the seed against a grindstone. Mr. Hahman said they chipped a piece off with a knife and found it to answer the purpose very well.

Does watering roses with warm water help them during the winter months? Mr. Gardner, of Jobstown, said he had found it very beneficial in growing roses. He started with a temperature of 40° and when that was increased the warm water was applied until the temperature reached 80° and the plants at present were very healthy; he referred to pot roses.

What was done at the carnation meeting in Pittsburg? was replied to by Mr. Craig, who spoke of being very much interested in the proceedings, there was a very good attendance and every one seemed too anxious to help the movement along. Some very fine papers were read that showed careful preparation. These were afterward published in the trade papers and could always be consulted and referred to. These papers had been prepared by scientific gentlemen as well as practical growers, and showed the advantage of having organizations of this kind and the good they can do. He also referred to the beautiful decorations at the banquet, which were the finest he had ever seen on similar occasions, and had words of the highest praise for the bountiful hospitality received at the hands of the local club.

What is the best fuel for heating greenhouses? was answered by Mr. Heacock, who uses buckwheat coal, which costs him $1.30 a ton. He thought oil might be profitably used if it could be depended on for a regular supply and that it might come in use some day. Coke breeze and soft coal Mr. Hahman had found to be a good combination and very economical.

How can we get protection from Bermuda lily growers? Mr. Zieber stated that he had been informed that orders for 100,000 cut lilies had been taken in Bermuda and were to be shipped in cold storage in vessels. These were for church decorations and come directly in competition with growers who had bought their bulbs last fall. He thought something should be done in the matter if it was possible. Mr. Craig thought there was not much danger as the flowers did not begin to compare with those grown here. Mr. W. Allen, of New York, who was present, said he had handled the flowers but had never found them satisfactory. The best lilies were bringing such a poor price in the New York market that he did not think the imported flowers would sell at all. Mr. Watson spoke of having seen some Bermuda grown flowers in Boston last year about Easter, which were worthless and that the parties who imported them were looking about this season for home grown lilies.

Two gentlemen were elected members and quite a number proposed for action next meeting.

The Easter plants are showing up very well and if the weather folks at Washington will only do what is right there promises to be a great display. Lilies, hydrangeas and azaleas will be in full supply and the quality very good.

On Sunday last the florists, store men and quite a number from the greenhouses gathered at Horticultural Hall and proceeded to arrange the decorations for the spring show. Under the guidance of Mr. Westcott, chairman of the committee, the hall soon assumed a gala appearance and everything was made ready for the exhibits, to be placed on Monday and Tuesday. While not elaborate the whole arrangement is very neat and will add much to the appearance of the show, which promises to be very good.

Business has moved along at a fair pace the past week, the demand being sufficient to keep prices of flowers about the same, except possibly the hybrids, the best of which can now be had for $6 per dozen, and a good sized dozen at that.

W. S. Allen was in town last week, as was also Caldwell the "Woodsman." We had pictured the latter gentleman in our mind's eye as wearing a heavy slouch hat, pants in boots and a six shooter protruding from his belt, but he proved to be a very different looking sort of man. He would easily pass for a Methodist preacher or a Chester County carnationist.

Chas. D. Ball has been housed the past ten days with the whooping cough; he contracted it from his children, who had a light attack, but Mr. Ball's case was a very severe one. He is now on the mend and expects to be all right in a few days.

Mr. Craig has recovered and is about as usual.

Messrs. Smith & Whitely have rented the greenhouses of Charles Price, of Lansdowne, a neighbor of theirs; this addition will more than double their capacity.

K.

Washington.

There was a big demand on the florists of the city recently for funeral flowers, the occasion being the funeral of the estimable wife of the public printer, Mrs. Frank Palmer. The employees of the printing office raised several hundred dollars for the purpose of purchasing flowers, and a floral committee was appointed to contract with a florist for the entire decorations. Some very fine pieces were the result of their efforts. Among them was a very handsome pillow of white carnations, fringed with valley; resting on the pillow was a large crown of violets, (Mrs. Palmer's favorite flower). I am told that there were 1500 of these flowers used in making the crown. By the side of this crown was a white dove. The piece was very beautiful, and was the design of Mr. C. F. Hale. C. Strauss & Co. had the Printing Office contract, and furnished a number of handsome designs. Among them was an elegant casket cover on a base of laurel leaves; the flowers used in making it were white carnations, valley, Roman hyacinths, Bride roses and Harrisii lilies.

Under the heading, "A very immodest Goddess—Mr. Butler is up with another pansy blossom bill," a local daily prints the following:

> Mr. Butler, of Iowa, introduced in the House yesterday (by request) a bill to establish a truer figure of American constitutional liberty, and another to amend the great seal of the United States. The first provides that after July 4 next the Goddess of Liberty shall be represented by a young woman of full stature, with full mature development and proportions, wearing high laced boots, reaching midway between the ankle and knee; hose reaching to the thigh; short skirts, reaching down to a point just above the knee; close-fitting bodice and sleeves to the elbow, and a cap molded from a blue pansy bud. She is to bear for arms, at her left hip, in place and lightly suspended over her right shoulder a pen with holder extended, and on her breast, instead of a shield, an American ballot in black and white.
>
> The other measure amends the law establishing the seal so as to provide, instead of the present crest which appears above the head of the eagle, a glory breaking through a cloud-pansy, surrounding thirteen stars, forming a constellation argent on an azure field.

Mr. Butler seems to be pansy struck, as a few weeks ago he introduced a bill looking to the adoption of the pansy as the national flower. The bill was referred to the Committee on Library, of which Hon. A. J. Cummings, of New York, is chairman. This probably is the last we will hear of the bill, as it is well understood that Mr. Cummings is in favor of the sunflower as our national floral emblem, and he is not likely to make a favorable report on a bill which he is not in full sympathy with.

Other parties are strongly urging the columbine, and are pushing the matter with a hope of having it adopted at the World's Fair next summer.

One of the largest dinner decorations ever attempted with tropical plants in this city was that for the complimentary dinner given to Vice-President Morton by the Senate of the United States, at the Arlington Hotel. Over nine hundred palms, pandanus and dracænas were used. The table was arranged in a rectangular form and was 56 by 36 feet in length and width, and the table itself about 3 feet, leaving an interior space about 50 by 30 feet. Immediately in the center of the hollow square was a plateau six feet in diameter of adiantum and pteris ferns with about 300 long stemmed Ulrich Brunners, making a blaze of red. The remainder of this interior space was completely filled with low growing palms, Pandanus Veitchii and dracænas, the palms running up against the inner side of the table, and blending in by the use of Asparagus plumosus in lavish profusion, literally filled with the most beautiful roses and other flowers the whole distance around the table. Through the center of the table sprays of A. plumosus were carelessly scattered with here and there crescents of Mme. Pierre Guillot roses and Romans. Alternating along the table for the entire 175 feet were beautiful vases in various delicate shades of Bohemian glassware and many light fantastic forms filled with Brides, Mermets, Woottons, carnations of various shades and bulbous flowers to the number of probably 3000 or more. A each plate was laid a very charming boutonniere of dendrobiums and lily of the valley, while the finger bowls had sprinkled in them lemon verbena and violets. In the alcoves around the room were banked large clusters of palms. With the electric light turned on the effect was most charming in its coolness and delicacy. The guests were arranged on the outside of the rectangle and numbered ninety. It is said that this form of table has never been used but once in Washington, and never before with such successful effect as to floral decoration. To C. Strauss & Co. belongs the credit for this elaborate and artistic decoration. Mr. Benj. Durfee may well feel proud of this success.

Senator and Mrs. Brice gave another of their weekly dinners Saturday evening. The entire decorations were of orchids and mignonette, with Asparagus plumosus and Adiantum Farleyense. The center-piece was of cattleyas, fringed with large spikes of mignonette. The mantels were banked with adiantums and filled with cattleyas. The dining rooms presented a rich and striking effect. They were decorated in Messrs. Small & Sons' most artistic style.

Lent does not seem to have had any effect thus far on society. Our florists all report good trade, in fact they say that Lent has made no perceptible difference. Orders for dinner and tea decorations are even more numerous since Lent begun. Flowers are plentiful and prices good.

With the inauguration of the new administration, trade is expected to increase, and our boys expect to be quite busy until warm weather compels society people to seek the cooling atmosphere of the summer resorts.

Notwithstanding the amount of time and labor expended by Messrs. W. R. Smith and Benj. Durfee, together with that of Hon. W. H. Hatch, the bill to charter the Society of American Florists failed to pass Congress. This was largely due to the rush of business the last two weeks of the session. The clamor for bills of a private nature crowded all other measures to the wall, and among them was our charter. We regret this very much, as it will now have to pass the senate again. Mr. Durfee assures me that this will be a small matter compared with getting it through the house. Mr. Hatch will in all probability be made chairman of the committee on agriculture in the next organization of the House, and we can depend on him to push our cause, though in making up the committee there will be much new and raw material, and the matter will have to be reconsidered by the committee, yet Mr. Hatch thinks there will be little or no delay in the committee, and if they can get it near the front of the calendar the charter may be complete by the annual meeting in St. Louis.

All efforts will be put forth to accomplish this end. Many of the obstacles which stood in the way of its passage at the last session have been overcome. The great objectors have had the matter fully explained to them by our President, and they now see it in an entirely different light, and we may reasonably expect them to withdraw their objections, or at least keep quiet when the bill comes up. I think it would be a capital idea to have every member of the S. A. F. write his representative in Congress urging him to support the measure and to push it forward with all speed. I fear there are many members of the society who do not fully appreciate the importance of a national charter, nor do they see the advantages to be gained by it. I will say they are many and important.

C. LESLIE REYNOLDS.

Baltimore.

Trade has been very dull in the main, and the Exchange is loaded up with the greatest lot of good flowers seen there for a year and more. Fine callas, roses, violets, etc., are simply rotting in masses for want of buyers. The only thing that can be said to be at all scarce is smilax, which is often very hard to get in good quality, at short notice. The weather has moderated to a surprising degree, and the only drawback to the spring-like mildness, is the occasional rainy day, and the unspeakable mud that is in the way of every suburban grower when he wants to get to market, a little of which is to be found even in the streets of the town.

The first matter considered at the club meeting was the report of the committee on securing a place in which to hold the chrysanthemum show. The committee reported having secured the cyclorama building from the 4th to the 13th of November inclusive. The reports of the financial secretary and treasurer for the preceding year were read, and as expected showed the club to be in a very prosperous condition financially.

At the election which ensued after the reports the following officers were secured for the year: President, Mr. I. H. Moss, Govanstown; Vice-President, Mr. Jno. Wiedey, Mt. Washington; Treasurer, Mr. Wm. B. Sands, 228 East Baltimore St.; Secretary, Mr. Wm. McRoberts, Jr., Govanstown; Financial Secretary, Mr. Fred G. Burger, 1128 Greenmount ave.; Librarian, Mr. Philip Welch, Waverly. The election for Vice-President was the pull of the evening, the returns being a pretty even thing between Wiedey and Ekas, until the boys began to think the banquet would be spoiled, and all got a little restive under the innumerable ballots that were taken.

Mr. Bauer exhibited a fine plant of heliotrope, Violet Beauty, a seedling of Mr. Jno. Berl, with a beautiful tinted, very large flower.

After the election all adjourned to Tierney's, where a sumptuous repast awaited them, and all were enlivened by the good cheer and happy guests. Halliday and Pentland were there as reminders of the old Maryland horticulture. Dr. Brooks, of the *Sun*, was the only representative of the daily press. After a few happy introductory remarks by the President-elect, Mr. Wm. B. Sands, who was toast-master, led off with a speech full of hopefulness, and anticipations of a glorious future for the trade in Baltimore. As Mr. Sands was for fifteen years secretary of the old Maryland Horticultural Society, his anticipations are founded on extended observation, and are shared by most of the members of the club. He hoped, as all the the rest do, for the time to come when we should gather round our own tables, in our own hall, concluding by presenting to the retiring president, Mr. Wm. Fraser, on the part of his many friends in the club, a beautiful silver tea-canister, elegantly wrought. Mr. Fraser, with much emotion, replied to the presentation speech, saying that he appreciated the honor, undeserved though he thought it, and though an ex-President, he did not intend to be an ex-worker, but would always be ready to do his part.

Mr. Sands next called on Dr. Brooks, whom he named the step-father of the club, to favor us with a few remarks, and in reply Dr. Brooks spoke of the pleasant life and sure, though small, profits of the business. Mr. Jas. Pentland, who came next, spoke of the rapid strides made by the trade during the past fifty years here, from the organization fifty-four years ago, of the Maryland Horticultural Society to the present day, urging the members of the club to work together faithfully and honestly, not trying to cut each other's throats, in trade, but charging one price for the same class of stuff and sticking to it. He also prophesied the falling off of the enthusiasm for the chrysanthemum in a few years, and advised the members of the club to prepare for it in time and be ready to replace it by the next favorite when the time comes.

Mr. Jno. Wiedey, who spoke next, excused himself in a few graceful remarks, and so did Mr. Theo. Eckardt, who came next. Mr. Wm. McRoberts also was under the necessity of asking to be let off and promised if he were to let Mr. Sands speak for him. Mr. S. accordingly rose and promised to be on time with the minutes all ready and numerous other pledges that will keep "Me" on his mettle if he observes them. After this Mr. F. G. Burger made a short speech complimenting the club on its success. Mr. Wm. Feast quite agreed with the utterances of Mr. Pentland and urged their earnest consideration.

Mr. McNab referred to his early years when men got $3 or 12 shillings a week and were enthusiastic botanists and lovers of the work in spite of the slender remuneration. He deprecated haphazard culture and thought all should study the things adapted to their soils and methods. Mr. Lindley Huggins responded to the "Ladies" in his usual happy style. Mr. E. A. Seidewitz replied to the "Press." He thought the press, at least the horticultural press, should be furnished with

MR. JOHN LAURENCE'S HOUSE OF PRIMULAS, HARRISBURG, PA.

the fullest details of all matters relating to the club and the trade. At the conclusion of his remarks Mr. Jas. Pentland called upon the club to drink standing the memory of one who though passed away from our midst lingers in our minds as a noble gentleman, a splendid botanist and a friend of many years, Mr. Wm. D. Brackenridge.

Short speeches were made after this by Mr. Hy. Bauer and several others and the meeting broke up at a late hour with singing "Auld Lang Syne."

WM. MCROBERTS, JR.

Stoppage in Transitu; or the Right to Intercept Goods.

This is the last remedy against goods sold which an unpaid vendor possesses. It arises after delivery of the goods to a carrier, when to all other intents the vendor is considered to have parted with his property in them and even lost what is known as the vendor's lien. The only ground for it is the insolvency of the purchaser, the law considering it contrary to reason and justice that the unpaid for goods furnished by one man should be applied to the payment of the debts of another. Insolvency will here be understood to mean a general inability on the part of the purchaser to pay his debts; and of this inability, it has been said, the failure to pay one just and admitted debt would probably be sufficient evidence, while in a number of cases the fact that the purchaser had "stopped payment" has been considered, as a matter of course, to be such an insolvency as justified stoppage in transitu.

Not only can actual vendors exercise this right, but likewise persons in positions similar to that of vendors. Thus, a factor or agent, who has purchased goods upon the order of his principal, but paid for them out of his own money, or a third person, who has advanced the price on behalf of the purchaser, and taken an assignment of the bill of lading, can exercise the right. But it would be otherwise with a surety for the price of goods, even though he should be obliged to pay for them if the purchaser did not. And here, as generally elsewhere, vendors can do by their agents what they are entitled to do themselves, though where the stoppage in transitu is effected in behalf of the vendor, by one who has at no time had any authority to act for him, a subsequent ratification of the vendor will be too late if made after the transitu is ended. So where the holder of certain bills of exchange, drawn by the vendor on the purchaser, for the price of the goods, assumed to act in behalf of the vendor in stopping them, and the assignees of the insolvent purchaser also demanded the goods, the court held that the property in the goods had vested in the assignees, by their demand of delivery, and this ownership could not be altered retrospectively by the vendor immediately afterwards adopting and ratifying the stoppage made in his behalf by the holder of the bills of exchange. Had the vendor been notified of the insolvency and written a letter ratify the stoppage before the transit ended it would have been sufficient, though such letters did not reach the agent until after the transit had ended.

The right of stoppage in transitu is not impaired by partial payment of the price, neither is it lost by the vendor's having received conditional payment by bills of exchange or other securities, even if he has negotiated the bills so that they are outstanding, unmatured in the hands of third persons. If, however, the contract of sale is apportionable, and payment has been made in respect to a part of the goods, the vendor has only the right of stoppage over the goods which remain unpaid for. And if the vendor has taken bills of exchange or other securities in absolute payment, that fact will defeat his right of stoppage, and he can only look to the securities for his payment. In case a part of the goods have reached the purchaser, the right of stoppage remains as to the residue, but as to the residue only.

The right of stoppage in transitu is properly subject to the lien of the carrier for his charges, but not to his lien for a general balance of account between him and the purchaser. In order to recover the goods from the carrier holding them under a lien for charges it is only necessary that the vendor pay or tender him what is rightfully due him at the time. Creditors of the purchaser cannot defeat the right of stoppage in the vendor by any attachment, execution or other lien against the purchaser until the latter has obtained such possession of the goods as would of itself defeat the right.

There is no particular mode of exercising this right required, and an English judge once said that a vendor was so much favored in this regard as to be justifiable in getting his goods back by any means not criminal before they reach the possession of an insolvent purchaser. It is sufficient for the vendor either to take possession of the goods or to give notice of his claim and purpose to the carrier, middleman or other person having at the time the custody of the goods. The usual mode is by simply giving notice to the carrier, stating the nature of the vendor's claim and forbidding delivery to the purchaser, or requiring that the goods be held subject to the vendor's orders. The notice must however be given to the person in possession of the goods, or if to his employer then under such circumstances and in such time as to enable him by using reasonable diligence to send the necessary orders to his servant.

The right of stoppage in transitu can be defeated before the delivery of goods into the actual possession of the purchaser or his assignee, only by a resale of them under such circumstances as to convey title, which may be done by transferring the bill of lading to a sub-purchaser in good faith for value. But a mere resale of the goods by the purchaser during the transit, unaccompanied with any indorsement or delivery of a bill of lading, will not defeat the vendor's right of stoppage.

The effect of stoppage in transitu is simply to restore the goods to the vendor's possession and renew his lien upon them as if he had never parted with the possession; but does not rescind the sale.

Sunset and Hoste.

My experience with Sunset for winter forcing is, that I regard it as the best "yellow" up to date. It is not apt to grow "bull heads" like Perle, better form, and even in dull cloudy weather is always a rich bright color, and lights up well, which cannot be said of Perle. Its highly colored leathery foliage adds not a little to its general attractiveness, and I find it a taking cut-flower rose with the retail trade. Grown under the same conditions as Mme. Hoste it will be found satisfactory.

What I have said of this rose for winter use hardly applies to summer. Perle is then freer and better. Perle gets into good shape and color, while Sunset fades to a dullish shade and easily discolors in handling. This is not true, however, during the winter and early spring months. It is therefore at its best when most needed.

Now one word as to Hoste, which has fallen into ill repute with eastern growers on account of its tendency to sport back, to its seed parent perhaps, a dirty sort of color and quite single. So far I have had no such experience. Every plant has proved true, and I regard Hoste as one of the best light roses for general winter use, whether in solid or raised beds. It is better than Bride for dull weather. The duller the weather the handsomer the color, and it is a good free cropper. In mid winter the leading shoots produce very large light tinted buds, on strong, erect stems, "whiter" than Bride at this season, that is, quite apt to be more or less greenish in its color tones under the same conditions. The side shoots produce freely smaller buds and much deeper color, a good soft yellow, taking the

place of Perle, making a fair substitute for winter, when Hoste is more profitable to grow. It needs to be grown like Watteville and Cusin, with plenty of air, burns easily; guard against mildew, especially in early fall. GROYE P. RAWSON.
Elmira, N. Y.

News Notes.

GRAND HAVEN, MICH.—Geo. Hancock is building another large carnation house.

UTICA, N. Y.—G. W. Chatfield has sold his business here and will be succeeded by Messrs. Timerman & Frasher.

MARINETTE, WIS.—The greenhouse of Geo. Vatters at this place was recently destroyed by fire; damage $900. He will rebuild immediately.

BOSKOOP, HOLLAND—Koster & Co., have adopted the name "Hollandia Nurseries," and will hereafter conduct business under that title.

SPARKILL, N. Y.—Germond & Cosgrove have purchased the greenhouse establishment of W. B. Corning and will conduct same in connection with their other two places here.

DENVER, COL.—The Denver Florist and Fruit Co's., property, which had an encumbrance of $23,000 upon it, was sold by the assignee to Bernard Beer for $3,250 above the encumbrance.

GERMANTOWN, PA.—At the March meeting of the Germantown Horticultural Society Mr. George Reddles was elected secretary in place of Mr. Thos. B. Meehan, resigned. A vote of thanks was given to Mr. Meehan. There was a large and interesting display of plants and cut flowers including cinerarias, azaleas, carnations, geraniums and bulbous plants.

DO YOU WANT an alphabetical list of the chrysanthemums in commerce in America, with class and a brief accurate description of each one, and synonyms noted? You will find such a list in our new trade directory and reference book.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—As assistant on private place by competent young man; state wages.
A. care Am. Florist.

SITUATION WANTED—By practical gardener, English, thoroughly experienced, in private family preferred; good references. T W, Glencoe, Ill.

SITUATION WANTED—As foreman or manager; 12 years' experience growing plants and cut flowers, carnations, roses, ferns, etc. Address
T E. Ashbourne P. O., Pa.

SITUATION WANTED—By a practical gardener and florist, 28, married, German, in private or commercial place. Address M. JAHN,
13 James St., Springdale, Holyoke, Mass.

SITUATION WANTED—By first-class gardener and florist; 15 years experience in this country; German, age 33; commercial or private. Address
S. WEBER, 138 Hampson St., New Orleans, La.

SITUATION WANTED—As foreman in a commercial place as rose grower; experience in cut flower work and decorating; good salesman, sober and trustworthy. Address FOREMAN, care Am. Florist.

SITUATION WANTED—As gardener or to take charge of park grounds or cemetery; 35 years experience; has had charge of a large cemetery the last 9 years. First class references.
J R, care American Florist.

SITUATION WANTED—By a good German grower in roses, violets, carnations and vegetables, etc.; good landscaper, 30 years' experience; 2 children; good references. Private place preferred.
CARL SCHAFFER, Deal P. O., N. J.

SITUATION WANTED—By a rose grower of long experience; thoroughly up in propagating and general greenhouse management; no family; strictly temperate; New England preferred. Address
ROSARIAN, care Peck & Sutherland,
67 Bromfield St., Boston, Mass.

SITUATION WANTED—By the 1st of April, by a practical florist, married, two children, German, 15 years' experience; thorough knowledge in roses, carnations, chrysanthemums, violets, palms, orchids, ferns, propagating, landscaping, mushrooms, vegetables under glass and out doors; sober and reliable. Private place in or about Chicago preferred; references. Good wages expected. Address
CH. GEBHARDT, Mayfair, Cook Co., Ill.

WANTED—Will John Ritchie, florist, communicate with Vaughan's Seed Store, Chicago?

WANTED—4,000 rooted cuttings of Daybreak carnations at once. Address
WESTERN, care Am. Florist.

WANTED—Two men wanted as assistants in greenhouses. Wages $25 and board per month. Address A B, care American Florist.

WANTED—A competent man to take charge of a retail flower store; must understand the business and come well recommended.
JAMES HORAN, Bridgeport, Conn.

WANTED—Gardener thoroughly experienced in management of hotbeds, competent to take charge. Address with full particulars
VAUGHAN'S SEED STORE, Chicago.

WANTED—A young man with some experience in greenhouses and a fair education. State wages per month, including board.
FLORIST, Box 353, Middletown, N. Y.

WANTED—A single man for general greenhouse work, sober and industrious; state age and wages expected with board.
A M C. box 27, Oxford, Chester Co., Penna.

WANTED—A single man on or before April 1, 1889, one who is able to run a retail business (store or greenhouse). State wages expected and address
J. H. ZSCHORNA, 627 De Kalb Ave., Brooklyn, N. Y.

WANTED—Immediately, competent and practical florist, to take charge of small place and grow general stock. State age, married or single, wages expected. Give reference. Address
CERCO, care Am. Florist.

WANTED—Working foreman, thoroughly competent handling roses and general greenhouse stock; must be a good potter; reference required; state wages. Address J. BECKER,
32d and Market Sts, Philadelphia, Pa.

WANTED—An assistant, married man with experience in general bedding stuff and cut flowers; wages $10 per week and house. Also a single man for same branch, wages $5 per week and board. When applying give references. Address
JOHN BECK, Bridgeport, Conn.

WANTED—Travelling salesman, competent and reliable, acquainted with wholesale trade, to take importation orders in June, July, for French nursery stock. State territory to be covered, conditions; give references and address to
IMPORTER, care American Florist.

FOR SALE—Florist store, good business established, in one of the best locations in Chicago; will sell at a bargain. G A S, care American Florist.

FOR SALE—Old established greenhouses in Western health resort, 4,000 feet glass, splendid stock. For particulars, address E T, care American Florist.

FOR SALE—I will sell my rooted cutting business, greenhouses, etc., at a bargain; well established, well advertised and growing.
S. B. FIELD, Roselle, N. J.

FOR SALE—$2,500 cash buys fine place of 5,000 feet of glass with good stock in good locality of Chicago; must sell. Address
F P, care American Florist.

FOR SALE OR TO LEASE—Eight greenhouses containing about 30,000 feet of glass within 12 miles of New York City. Enquire of A. HIBBINS,
130 Dodd St., E. Orange, New Jersey.

FOR SALE—Unequaled opportunity for a live florist to purchase a small, well-paying established business. For all particulars address
Box 432, Haverstraw-on-Hudson, N. Y.

FOR SALE.—Paying florist business; large selected stock; good patronage, home and shipping; well located city south; will sell now or in July. Address
G M J, care American Florist, Chicago.

FOR SALE First-class florist and bird store doing strictly cash business; good trial given; owner sick, must sell. WM. C. FOGARTY,
736 Eighth Ave., New York, Bet. 45th and 46th.

FOR SALE Paying florist's business, large selected stock, good patronage, home and abroad, ¾-acre lot, good dwelling, splendidly located; best reasons for selling. Address PROF. BAGLEY, Abilene, Kans.

FOR SALE—New house, 8 rooms, 6 acres land, orchard, small fruit, business (raise ornamental grasses), 4 blocks from depot. Lake Michigan in sight. Chicago can be reached in two hours.
B, care American Florist.

FOR SALE OR TO LEASE—Cut flower plant containing 30,000 feet of glass in Chicago; in first-class condition, all modern conveniences. Stock in fine condition for the World's Fair year. Address
A. T. JACKSON, Bowmanville P. O., Chicago.

FOR SALE.

In Andover, Mass., 5 greenhouses all stocked and ⅝ acre of land, the latter worth $1200. Good local trade, with fair prices. Greenhouses on Main St., 1 block from electric cars, ¼ mile from R. R. depot. Owner wishes to go to the Pacific slope. Address
BOX 372, ANDOVER, MASS.

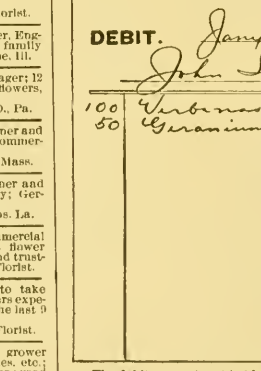
FOR LEASE.

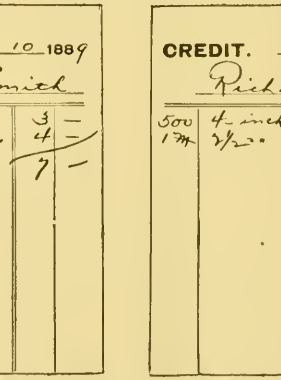
Two new greenhouses 100 feet long, containing 5,000 feet of glass, heated by steam, modern improvements, stock included; near a thriving town. Business established 8 years. Rent low to a good florist. For particulars, address
MRS. S. J. Nettlehouse, Adm'x, Waynesboro, Pa.

WANTED—A FOREMAN

Capable of taking charge of a large establishment where cut flowers are grown. Must have had great experience and be able to furnish best of references. Send full information, giving age, whether married, copies of references, etc. A good position and a good salary to the right man. Position ready any time before June 1. Address
Grower, care American Florist.

We can now furnish in any quantity desired Debit and Credit Tickets of which we give below samples reduced one-half in size.



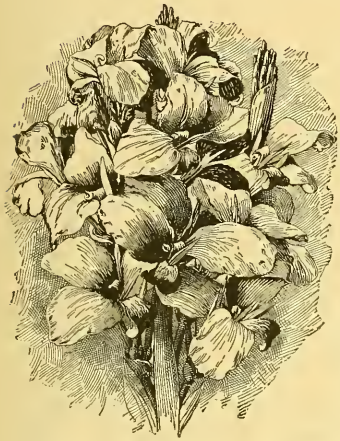


The debits are printed in black and the credits in red, so they can be readily distinguished. They are put up in blocks of 100; 50 of each, placed back to back; thus but one block will have to be carried. By means of these tickets an entry of a sale or receipt of goods can be made anywhere—in the house or in the field—and afterwards filed. Tickets for each transaction in your business will make data from which a bookkeeper can readily work. With this simple and easy means of keeping a record of your business can you afford to neglect so important a matter?

Price of Tickets, postpaid, 100, 20c.; 200, 35c.; 300, 50c.; 500, 75c.; 1000, $1.40.

AMERICAN FLORIST CO.,

THE NEW CANNAS, MME. CROZY, STAR OF '91, ETC.



These are probably the most profitable novelties that can be handled this season. If you sell pot plants nothing that you can handle will sell so well and pay so good; this ought to make very profitable stock for you to start and pot on; it will sell very rapidly. When in bloom it only requires to be seen to sell and nice plants should be readily retailed at from 50 cents to 75 cents each; nothing that you could handle would afford you as satisfactory a profit. Dormant roots should be secured now, which can be forwarded at very little expense and started into growth and potted This is the time to start the dormant roots; in starting them do not pot them, but put in damp Sphagnum moss, placing them in some warm spot; the Sphagnum furnishes moisture enough to start them into growth, but it does not hold water enough to cause them to decay. They not only occupy less room, but they start better in this way, than if potted first. When well started they should then be potted.

MME. CROZY AND STAR OF '91 make splendid pot plants and no plant that we know of, unless it be Tuberous Begonias, makes as much display in the greenhouse. It is a plant that can be recommended to your customers with the greatest confidence and as it can be bought very cheaply this season, we think it the most profitable novelty that can be handled by any Florist who sells pot plants. These Cannas were offered for the first time last year in any quantity and had an unprecedented large sale, nothwithstanding the fact, that the price at which they were offered, both wholesale and retail, was almost prohibitory to the average buyer, as they retailed last year at $1.00 each, and could not be bought for less than $60.00 per hundred wholesale, which placed them beyond the reach of the average buyer, but notwithstanding this high price, very large quantities were disposed of, but now, that they can be offered at reasonable prices, those who do not secure stock at once and get them in shape for spring sale will miss it, as on account of their high price last year, they were not within the reach of many, and this season in most localities they will be actual novelties as much as if they had never been offered before anywhere. If you have found, heretofore, that Cannas would not sell, do not think because of that, these would not. The flowers are so large and they bloom in such small pots that they have revolutionized Canna growing. They are not only among the very finest plants for bedding, and will be in great demand by those who desire something choice and rare to vary the monotony of out-door gardening, but they also make elegant plants for the conservatory, both summer and winter; in fact, one of the finest plants for conservatory decoration there is to-day. Every shoot blooms, and as often as a truss of blooms is past its prime, another shoot pushes out beyond it, and each stem blooms three, four, and five times in succession; as the plants throw up numbers of shoots, they are a mass of most gorgeous bloom constantly. We have never offered a plant that has given such unequaled satisfaction, and for which there has been such a demand as there has been for these new Cannas. Heretofore, we preferred to wait before investing in French Cannas until something was produced of intrinsic merit, pronounced enough in character to make it really valuable. Having satisfied ourselves of the value of these novelties beyond all question, we invested in them very heavily, and we have now by far the largest stock of these in the country. Park and Cemetery Superintendents and florists generally should make large plantings of this stock, which will make a fine display for them, and the increase of the stock will be one of the best investments that can be made for another year.

MME. CROZY.—Flowers flaming scarlet, bordered with gold, a marvelous combination of colors, having all the delicacy and beauty of the rarest orchid. As a rule, the more valuable the variety, and the nearer it reaches perfection, the less vigorous it is, but in this case we have one of the strongest and most vigorous growing plants that has been produced in the Canna line so far. This Canna is one that every one can succeed with, as it will grow in the open ground as readily and easily as the common varieties of Cannas, which have been so largely used in sub-tropical gardening. These plants produce all the wealth and richness, and the tropical luxuriance of foliage of the common kinds, added to which is the gorgeousness of their flaming panicles of bloom, which are borne in immense heads at the terminus of every shoot. They produce a very much greater effect than gladiolus, being very much larger. In order to give an idea of the large size of these flowers we have had a painting made, showing the actual size of the flowers and their beautiful coloring; we will be pleased to send this free to any who may not have received it; it is no exaggeration whatever, giving the actual size and the vivid and beautiful coloring of Mme. Crozy. When the large size of the flowers and the large heads of bloom are taken in connection with the freedom with which it blooms, it makes one of the most attractive plants for bedding that it can be possible to conceive of.

STAR OF '91.—More dwarf than Mme. Crozy and valuable on this account. A mass of scarlet when in bloom, but the individual flowers are nothing like as perfect as Mme. Crozy. It is an elegant pot plant and will bloom in the house in the winter splendidly, for which purpose it is admirably suited; as a pot plant for florist's sale, it bids fair to eclipse anything that has been offered for years, as its attractiveness and ease of culture, certainty of doing well, etc., make it a plant a florist can recommend, knowing it will please the buyer every time.

GEOFFREY ST. HILAIRE.—By far the best of the dark-leaved varieties among the new seedling Cannas. Without taking into consideration the flowers of this variety, it would still be by far the best dark-leaved Canna, but when the large size of the flowers is taken into consideration, coupled with the richness of the dark maroon colored leaves with a dark metallic or bronze lustre, it will be appreciated by all lovers of rare and valuable plants. Flowers light salmon-scarlet.

FRANCOIS CROZY.—This variety is identical with Mme. Crozy in habit and general style of growth, but the flowers are bright orange, bordered with a narrow edge of gold, one of the most desirable shades that could be secured. The plants are somewhat more dwarf than Mme. Crozy, and are fairly covered with flowers.

PRICE, STRONG ROOTS, $15.00 PER 100; $125 00 PER 1000.

☞ See our adv. of Novelties in Cannas in last issue.

F. R. PIERSON COMPANY,

TARRYTOWN ON THE HUDSON, NEW YORK.

Catalogues Received.

C. E. Allen, Brattleboro, Vt., plants and seeds; Geo. W. Park, Libonia, Pa., seeds; Stark Bros., Louisiana, Mo., nursery stock; Woolson & Co., Passaic, N. J., hardy plants; Ludwig Moller, Erfurt, Germany, gardening books, etc.; F. Walker & Co., Louisville, Ky., plants; F. W. Kelsey, New York, plants and nursery stock; George S. Josselyn, Fredonia, N. Y., grape vines; E. Y. Teas, Irvington, Ind., nursery stock; M. A. Hunt, Terre Haute, Ind., forcing roses.

THE NEXT of our series of special numbers will be devoted to the rose, the "Queen of Flowers." It will be issued on March 30 and will take the place of our usual special spring number. We shall make this issue even handsomer than any of the special numbers yet issued and will spare no expense to make it worthy of the flower to which it will be mainly devoted.

WHEN writing our advertisers please use one of your printed business letter heads or enclose your business card.

Golden Returns.

200,000 ROSES 200,000

We offer well established, healthy plants in below named and many other sorts:

From 2-inch pots, $ 3.00 per 100; $30.00 per 1000
From 3-inch pots, 6.00 " 60.00 "
From 4-inch pots, 12.00 " 120.00 "
Not in excess of any one variety.

50,000 Hybrid Perpetual Roses 50,000

at $4 per 100; $40 per 1000, in 50 select varieties.

New and Rare Varieties at Special Rates given in our Wholesale List, now ready.

WE NAME A FEW SORTS ONLY:

Aurora, Bosanquet, Comt. de Labarthe, Bon Silene, Cels, Devoniensis, C. Mermet, Etoile de Lyon, Hermosa, Mme. Cusin, H. M. Stanley, Malmaison, Marie Guillot, Mme. Lambard, Marie Lambert, Marechal Niel, Kruger, Niphetos, Mme. Jos. Schwartz, Safrano, Perle des Jardins, Sombreuil, The Bride, etc., etc.

For anything in the Florist line, or send your lists to be priced. Address

NANZ & NEUNER,
LOUISVILLE, KY.

Roses of Rare Excellence; strong 1 and 2-yr., outdoor grown, budded and own roots. Leading Nurserymen call them "best ever seen." Shall we express sample?

	100	1000
Climbing, 2-yr., 3 to 5 ft., own roots	$8	$70
" 1-yr., 2 to 3 ft., own roots.	7	60
Hyb. P., 2-yr., 2 to 4 ft., budded or own roots	9	85
" 1-yr., 1½ to 2 ft., " " "	8	75
Mad. Plantier, 2-yr., 2 to 4 ft., own roots	8	70
" " 1-yr., 1½ to 2 ft., own roots	7	60
Moss, 2-yr., 2 to 4 ft., budded or own roots.	9	85
" 1-yr., 1½ to 2 ft., budded or own roots	8	75

Evergreens, 2, 3 and 4 feet, fine. Full Stock Fruit Trees, Ornamentals—Everything! Stark Bros., Louisiana, Missouri.

ROSES.

TEAS . . . . . $30.00 per 1000
HYBRIDS . . . . . 40.00 per 1000
Healthy plants, in 2-inch pots.
Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.
Trade list on application.

Jacob Schulz,
LOUISVILLE KY.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST. . . . . .
ANCHORAGE ROSE CO., Anchorage, Ky.

ROSES. ROSES.

—PLANTS FOR FLORISTS.—

BRIDESMAID, strong, 2½-inch pot plants.....$12.00 per 100

	Per 100	Per 1000
METEOR.	$4 00	$35 00
CLOTHILDE SOUPERT	4 00	35 00
PERLE DES JARDINS	5 00	40 00
CATHERINE MERMET	4 00	35 00
THE BRIDE.	4 00	35 00
MARIE GUILLOT.	4 00	35 00
NIPHETOS	4 00	

	Per 100
MME. HOSTE	4 00
HERMOSA	4 00
SOUV. DE WOOTTON.	4 00
PAPA GONTIER	4 00
MME. PIERRE GUILLOT	4 00
ETOILE DE LYON	4 00
MALMAISON	4 00

General Collection of TEAS, BOURBON and POLYANTHAS in 50 leading varieties. $4 per 100; $35 per 1000.

	Per 100
GERANIUMS, in fine assortment, per 1000 $35,	$4 00
CANNAS, large flowered, French, in 15 varieties.	8 00
" large flowered French, in 8 scarce sorts	15 00
" Madam Crozy.	15 00
" Tall growing varieties	4 00
DAHLIAS, a choice collection, strong roots.. .	8 00

	Per 100
CALADIUM Esculentum, 7½ to 10 in. circum .	7 00
" " 6 to 7½ in. circum .	5 00
" " 5 to 6 in. circum .	3 50
BEGONIA Rex, in 12 named sorts..	5 00
" Vernon	8 00
CARNATIONS, Edna Craig and Grace Battles.	12 00
POPPIES, Bracteatum and Royal Scarlet. . .	8 00

Full assortment of Hardy Shrubs, Vines, Herbaceous Plants, Pæonies, etc. Large supply Hybrid Perpetual, Moss and Climbing Roses, field grown.

CATALOGUES AND PRICE LIST FREE.

THE STORRS & HARRISON CO.,
. . . . PAINESVILLE, Lake Co., OHIO.
Mention American Florist.

$80 Per 1000 **$10** Per 100 **$15** Per 100

This is the last chance to get a THOUSAND LOT of ROOTED CUTTINGS of the New Rose

BRIDESMAID

FROM HEADQUARTERS.

Express charges are very moderate on this class of plants, and the opportunity for thus conveying large quantities to distant points will soon be gone.

Rooted Cuttings.....per 1000, **$80.00**
Plants, from 2½-inch pots.....per 100, **10.00**
Plants, from 3½-inch pots.....per 100, **15.00**

The good quality of the stock sent out from the SUNNYWOODS GREENHOUSES can be relied upon.

FRANK L. MOORE, CHATHAM, NEW JERSEY.
Mention American Florist.

PERLE ROSES.

ALSO BRIDES AND MERMETS.

No better stock in New York State. Orders solicited for April or May delivery, in 2½-inch pots; or in 4-inch pots June and July.

NIPHETOS, BON SILENE AND MME. HOSTE IN LIMITED QUANTITIES.

Salter Bros.,
42 W. Main Street, ROCHESTER, N. Y.
Mention American Florist.

ROSES. Clothilde Soupert. ROSES.

$6.00 PER 100.

Grand, healthy plants from 3-inch pots, are in splendid condition for Spring sales. make this price to move them quickly. We want the room for Easter stock.

MERMET, NIPHETOS, BRIDE, GONTIER, WATTEVILLE AND HOSTE, from 2-inch pots, $4.00 per hundred

DAVID CLIFFE, Germantown, Phila., Pa.

Orders may be sent to me direct, or to my Special Wholesale Agents John Gardiner & Co., Philadelphia, and will receive best care and attention in either case. JOHN BURTON.

"American Belle."

Delivery April 15, 1893.
$60 per 100.
$400 per 1000.

FOR The Florists of the U. S. A.

FROM JOHN BURTON,
Chestnut Hill, PHILADELPHIA.

FORCING ROSES
Wideawake Florists will prepare now for next winter.

We make a specialty of all the leading sorts and can furnish healthy young stock to be shifted into one size larger pots on arrival at following prices:

$6 per 100 for Am. Beauty, White La France and Duchess of Albany.
$4 per 100 for Sunset, Mme. Hoste, Mme. Pierre Guillot, La France, Perle, Mme. Cusin.
$3 per 100 for Niphetos, Bride, Mermet, Bon Silene, Safrano.

Also all the famous new sorts: Bridesmaid, Mme. Testout, Kaiserin Aug. Victoria, etc. at lowest Market Prices.

Send List to be priced. Address
NANZ & NEUNER,
LOUISVILLE, KY.

I WILL OFFER CHEAP
FOR NEXT 30 DAYS,
The following Roses, rooted in December, and as fine and healthy stock as any grower can send out.
SEND FOR PRICES.
Bridesmaids, Sunsets, Brides, Niphetos, Mermets, Amaryllis of sorts, Perles, Geraniums, and Florists' Seeds.
Hydrangea grandiflora panicula, 2 years, 5 cts.
Deutzia rosea fl pl., Climbing Roses, 2 yr. 5c.
Address E. HIPPARD, Youngstown, O.
Mention American Florist.

FORCING ROSES
All the old, and such new varieties as have been proved, kept in stock.
M. A. HUNT,
TERRE HAUTE, IND.

3,000 PLANTS OF
Jack Roses for Sale.
2 feet, $10.00 per 100. 2½ feet, 12.00 per 100.
3 feet, $15.00 per 100.
All well branched and on their own roots.
JORDAN FLORAL CO., - St. Louis, Mo.

MADAME CAROLINE TESTOUT.
The best rose of its color in existence. It has been fully tested in the New York market and
IT SELLS.
Healthy plants from 2½-inch pots now ready. Per 100, $25 00; per 1000, $200.00; 500 at 1000 rates.
ERNST ASMUS, West Hoboken, N. J.

ROSES.
FINE PLANTS and ROOTED CUTTINGS
AMERICAN BEAUTY, LA FRANCE, CATHERINE MERMET, BENNETT, BRIDE, WOOTTON, GONTIER.
METEOR, PERLE DES JARDINS, WATTEVILLE, MME. CUSIN, BRIDESMAID, NIPHETOS,
Specially fine stock in the TWO MOST FASHIONABLE ROSES grown, METEOR and AMERICAN BEAUTY.
SEND FOR PRICES. CHAS. F. EVANS & BRO., FRANKFORD, PHILADELPHIA, PA.
Mention American Florist.

ROSES Fine, Healthy, 2¼-inch Pots.
Perles, Brides, Mermets, Niphetos, Papa Gontier, Hoste, Watteville, Cusin, La France, Albany, Wootton, at . $5.00 per 100, $45.00 per 1,000.
Meteor at . . . . . $6.00 per 100, $55.00 per 1,000.
Climbing Perle, at . . . . $10.00 per 100.
John Henderson Co.,
FLUSHING, N. Y.

SEND COPY early for advertisements in our special rose number to be issued March 30.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

MR. E. G. HILL has been confined to the house with "La Grippe" for several weeks but is now improving.

THE ALAMEDA COUNTY, (Cal). Floral Society has issued a premium list for their spring show, which will take place at Oakland April 19-22 inclusive. A variety of premiums is offered, both for amateurs and professionals.

MR. E. HIPPARD has invented a device by which it is said ventilating machinery can be made to lift sash uniform in height from one end of the house to the other without the least sag. Sash may also be lifted higher at the far end if so desired.

VIOLETS were recently received from Henry Smith, of Grand Rapids, Mich., who informs us that these flowers have been unusually healthy with him during the past winter. They were of excellent quality, as were also some long stemmed Brides and Mermets also received from Mr. Smith.

IF YOU have not already ordered a copy of our directory and reference book you are missing a good thing that you ought to have. Remember that it contains not only a list of those in the trade but a vast amount of reference matter of great value to every reader of the FLORIST. The reference lists of roses, chrysanthemums and carnations are alone worth the price of the book.

GREENHOUSE HEATING.

BY A. B. FOWLER.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.

It is highly commended by Mr. John Thorpe and others. Postpaid, 75c.

Sent on receipt of price. Address,

AMERICAN FLORIST,
CHICAGO

FOR SALE.

THE CUTS

USED IN ILLUSTRATING THIS PAPER.

Write for prices on any which you have seen in previous issues and would like.

AMERICAN FLORIST CO.
CHICAGO.

WHITE DOVES
FOR FLORISTS.
Largest and finest stock in the United States. Write for prices to
S. J. RUSSELL,
103 Van Winkle St., Jersey City, N. J.
AGENTS:
J. C. Vaughan, Chicago, Ill.
H. Bayersdorfer & Co., Phila., Pa.

Fancy. Dagger.

2,000,000
HARDY EVERGREEN CUT FERNS,
Especially for Florists' Use.
SPECIAL ATTENTION PAID TO SUPPLYING THE WHOLESALE TRADE
FIRST QUALITY HARDY CUT FERNS, $1.25 per 1000. In lots of 5000 and upwards, $1.00 per 1000.
L. B. BRAGUE, Hinsdale, Mass.

Asparagus Plumosus Nanus.
CUT STRINGS; 6 to 8 feet long, 50 cents each. 10 to 15 feet long, $1.00 each.
In large or small quantities all the year round. The largest stock in the country.
W. H. ELLIOTT, Brighton, Mass.

We are the People!
Who? KOFFMAN,
Where? WALDEN, Orange Co., N. Y.
What? **SMILAX**
25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.
When? ALL THE YEAR AROUND.
Also Adiantum Cuneatum Fronds At $1.25 per 100.
And he pays the Express.

HARDY CUT FERNS?
Oh Yes, over
5,000,000.
I can supply you the year round with A1 goods. Also new Bouquet Green, Laurel festooning, etc.
H. E. HARTFORD,
18 Chapman Place, BOSTON, MASS.

IF YOU NEED ANY
Cape Flowers, Immortelles, Grasses, plain or fancy Baskets, Metal Wreaths, Letters, Doves, or any other thing in the Florists' supply line, mail us your order.
REMEMBER WE ARE THE Leading Manufacturers of Wheat Sheaves and Baskets, and Importers of Florists' Supplies.
Catalogue on application. . . .
ERNEST KAUFMANN & CO.,
113 N. 4th Street, PHILADELPHIA, PA.

MARSCHUETZ & CO.,
FLORISTS' • SUPPLIES,
23 & 25 N. 4th St., PHILADELPHIA, PA.
Send for Catalogue.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE
FLORIST,
1122 PINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STEET,
St. Louis, Mo.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

SMITH, The Florist,
GROWER OF
Fine Roses & other Cut Flowers
WHOLESALE AND RETAIL,
77 S. 7th Street. MINNEAPOLIS, MINN.

GEO. MULLEN,
WHOLESALE FLORIST.
Florists' Supplies Always in Stock.
17 CHAPMAN PLACE,
(Off School St., near Parker House).
BOSTON, MASS.
Orders by Mail, Telegraph, Telephone or Express promptly filled.

H. BAYERSDORFER & CO.,
WHOLESALE
FLORISTS' SUPPLIES ONLY,
50 N. 4th Street,
PHILADELPHIA, PA.
Our new Catalogue is now out, free upon application.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser in these columns.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.

	Per 100
Perle, Gontier, Niphetos	$ 4.00
Mermets, La France, Bride, Wootions	5.00
Meteors	10.00
Jacqs	12 50
Carnations, short	1.00
" long	2 00
" " fancy	2 50
Romans, Valley, Narcissus, Tulips	3.00
Violets, Adiantum	1.00
Callas, Harrisll	10.00
Smilax	15.00

Above prices in effect till next issue of this paper.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
116 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.: Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange.
45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY & CO.
Wholesale and Commission
FLORISTS,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

WHOLESALE FLORISTS
La Roche & Stahl
N. E. CORNER
13th & Chestnut Sts.,
PHILADELPHIA.
Mention American Florist.

SAMUEL S. PENNOCK,
Wholesale Florist
REMOVED TO REAR OF 42 S. 16th ST.,
Philadelphia, Pa.

CUT SMILAX.
From Nov. 1st to May 1st our price for Smilax will be 20 cents per string. Quality first-class. Prompt attention to orders by wire.
J. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

Wholesale Markets.

Cut Flowers.

NEW YORK, Mar. 14.

Roses, Bon Silene, Gontiers	1.00@ 3.00
" Perles, Niphetos	2.00@ 4.00
" Mermet, Bride, Hoste	2.00@ 6 00
" Cusin, Watteville	2.00@ 6.00
" Bridesmaid	2.00@ 8 00
" La France	4.00@10.00
" Meteor	4.00@12.00
" Jacquemlnot	6.00@15.00
" Beauty	10.00@60.00
" Morrison	15.00@20.00
" Hybrids	10.00@35.00
" Mme. Caroline Testout	10.00@30.00
Carnations	.75@ 1.00
Valley, hyacinths, tulips, daffodils	2.00@ 3.00
Harrisll	2.00@ 5.00
Callas	3.00@ 6.00
Violets	.50@ 1.00
Cattleyas	60.00
Mignonette	2.00@ 6.00
Adiantums	1.00
Lilac (bunch)	1.00

BOSTON, Mar. 14.

Roses, Niphetos, Gontier	3.00@ 4.00
" Perle, Sunset Wootton	4.00@ 6.00
" Bride, Mermet	4.00@ 8.00
" Meteor, Hybrids	8.00@25.00
" Jacqs	8 00@16.00
Carnations	.75@ 1.50
Valley, daffodils, tulips	1.00@ 3.00
Narcissus, Paper White	1.00@ 2.00
Heath, bunch	.50@ .75
English primroses	.98@ .10
Violets	.50@ .75
Mignonette	1.00@ 5.00
Callas, Harrisll	4.00@ 8.00
Pansies	.50@ .75
Freesia	1.00@ 2.00
Smilax	17.00
Adiantum	1.00@ 2.00
Asparagus	50.00

PHILADELPHIA, Mar. 14.

Roses, Perle, Gontier, Niphetos	4.00
" Mermet, Bride, Albany	8.00
" La France	8.00@10.00
" Hoste, Cusin, Watteville	4.00@ 6.00
" Bennett, Wootton, Gulliot	6.00@ 8.00
" Meteor	8.00@10.00
" Beauties	25.00@40.00
American Belle	40.00@50.00
" Brunners	40.00@50.00
" Laing, Magna Charta	25.00@40.00
Carnations	1.00@ 1.50
Mignonette	1.00@ 2.50
Violets	.50@ 1.00
Valley	2.00@ 3.00
Daffodils	4.00
Tulips	4.00@ 5.00
Freesia	1.00@ 1.50
Callas, Harrisll	8.00@10.00
Adiantum	1.00@ 1.50
Asparagus	50.00@75.00
Smilax	15.00@20.00

CHICAGO, Mar. 14.

Roses, Perles, Niphetos Gontier	3.00@ 4.00
" Mermet, La France, Albany	4.00@ 6.00
" Bride, Wootton, Bennett	5.00
" Beauty	12.00@20.00
" Jacqs	12.50@15 00
" Hybrids	25.00
Carnations (short)	1.00
" (long)	1.50@ 2.00
" (fancy)	2.00@ 3.00
Callas, Harrisll	10.00@12.00
Romans Valley	3.00@ 4.00
Violets	.75@ 1.00
Daffodils	3.00@ 4.00
Tulips	3.00@ 4.00
Freesia	3.00
Marguerites	.60@ 1.00
Mignonette	2.00
Smilax	15.00@18.00

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

WHOLESALE FLORISTS,
JOBBERS IN . . .
. . FLORISTS' SUPPLIES,
FLORISTS' VASES.
METS,
BRIDES,
GONTIERS,
CARNATIONS,
ALWAYS ON HAND.
1 Music Hall Place,
BOSTON, MASS.
HORTICULTURAL AUCTIONEERS. . .

Mention the American Florist when writing to advertisers on this page.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
The finest Roses, Violets and Carnations
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

HENRY W. BAYLIS,
Wholesale Florist
940 BROADWAY,
. . . . NEW YORK.

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., BOSTON, MASS.

The Seed Trade.

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1893. Applications for membership should be addressed to Wm. Meggatt, chairman membership committee, Wethersfield Conn.

IS IT not time that onion sets as well as clover, timothy and other grass seeds, were sold by the 100 pounds instead of by the bushel?

MR. CHAS. BATES, of Vilmorin, Andrieux & Co., sailed from New York on March 8 on the Teutonic. Mr. B. has just recovered from his long illness in Montreal.

THE Holland bulb agents are early in the field, some five or six having already landed in New York. Do they accept orders subject to cancellation in case of cholera troubles?

MR. V. H. HALLOCK stopped over on his way to California to pay a visit to Uncle John. It is Mr. Hallock's first visit to Chicago and the West and he commented very favorably on what he saw.

REPORTS FROM Charleston, S. C., state that the thermometer went down to 25 degrees the night of the 4th inst, resulting in injury to the pea, strawberry and beet crops and cutting down such potatoes as were above ground.

BOSTON FLORIST LETTER CO.,

13 Green Street, BOSTON, MASS.
Address all correspondence to 1 Music Hall Place.

Manufacture THE BEST LETTERS IN THE MARKET.
Sizes 1¼-inch and 2-inch, $2 00 per 100. Patent fastener with each letter.

With orders for 500 letters we give away a nicely stained and varnished box. See cut in next week's American Florist.

Our letter is handled by all the wholesalers in Boston.
AGENTS: Marschuetz & Co., 25 N. 4th St., Philadelphia, Pa.; A. Rolker & Sons, New York; F. E. McAllister, 22 Dey St., N. Y.; E. Kaufman, Philadelphia; H. Bayerdorfer & Co., Philadelphia, Pa.; A. D. Perry & Co., 33 Warren St., Syracuse, N. Y.; A. C. Kendal, 115 Ontario St., Cleveland, O.; E. H. Hunt, 79 Lake St., Chicago; Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.; H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O.; T. W. Wood & Sons, 6th and Marshall Sts., Richmond, Va.; Jas Vick's Sons, Rochester, N. Y.; Dan'l B. Long, Buffalo, N. Y.; C. A. Kuehn, St. Louis.
J. A. Simmers, Toronto, Ont., Agt. for Canada.

TRY DREER'S GARDEN SEEDS, Plants, Bulbs & Requisites. They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.
HENRY A. DREER, Philadelphia, Pa.

Mention American Florist.

VERBENAS, $2.50 per 100; $20.00 per 1000.
CANNAS, assorted, French, $3 per 100.
PELAGONIUM Fred Dorner, fine plants showing bud, $10.00 per 100.
ROSES, H. P's, Climbers, Forcers.
JOSEPH HEINL, Jacksonville, Ill.

CHEAPER THAN THE CHEAPEST.
Alternanthera, 4 Colors.
Rooted Cuttings, very strong, 80c. per 100, 10 per cent. cheaper in large lots for cash. The same, 2½-in pots, 2 in one pot, at $2.50 for 100. The same, strong from boxes, at $1.50 per 100. Eulalia, two kinds, 4-inch pots, at 6c. each. Euonymus, 3 colors, 2½-in. pots at $3.00 per 100. Coleus, assorted lots, at $2.50 per 100 from 2½-in. pots. Water Lilies from seed, pots, $1.00 for 12. The above prices hold good for 10 days only.
Address, F. J. ULBRICHT, Anniston, Ala.

FOR SALE.
VIOLETS.
Marie Louise Runners: healthy stock, good plants.
HENRY HESS, - - Cockeysville, Md.

KUYK BROTHERS,

Archipel Nurseries,

HILLEGOM, HOLLAND.

DEPOSED.

Cable address: "KUYKBROS., Hillegom." Kuykbros. is one word; telegrams Kuyk only, are undelivered.

DEAR SIR:

As you have been informed by circular, the partnership between me, W. KUYK, and my Brother, has been dissolved on the 31st of December, 1892.

From the 1st of January, 1893, I have taken in another partner and we are carrying on the same business and under the same style.

We bought from the late firm all the bulbgrounds, warehouses, buildings and bulbs, and are exactly in the same position to fulfill your esteemed orders as before.

We hope with the valuable aid and assistance which the retention of the experienced and capable staff hitherto employed will ensure us to merit the support of all who have in the past patronized the late firm.

Besides that each branch or department will be under the supervision of a skilled foreman, we have in our employ an energetic general manager and all will have also our own personal direction.

In the hope of securing therefore a continuance of your valued patronage, we beg to solicit your further favors and trust we may in the future have the honor of furnishing your requirements, which, be assured, shall claim our most careful attention.

Yours very truly, **KUYK BROS.**

Livingston's New Tomatoes

Dwarf Aristocrat.
A beautiful smooth red sort with strong upright vine like Dwarf Champion, can be set close, excellent for small gardens.
Plants Sell on Sight. Money in Growing them. Try it.

Buck-Eye State.
The largest smooth Tomato in the world. Rich fruit in immense clusters, grandest Tomato for market ever offered. Packets of either, 25c., 3 for 50c., 7 for $1.00.
SEED ANNUAL SENT FREE.
Describes above fully. Also our Mr. A. W. Livingston's NEW BOOK ON TOMATOES, which every grower should have.
A. W. Livingston's Sons, box 411, Columbus, Ohio.

Received March Importation of MUSHROOM SPAWN.
Per lb. 15 cts.; 10 lbs. for $1.20; 100 lbs. $8.00.
W. W. BARNARD & CO.,
Office: 6 & 8 N. Clark St., Warehouse: 186 Kinzie St.,
CHICAGO.

MEECH'S TUBEROUS BEGONIAS.
The Finest Strain in Existence.
For Prices see American Florist for January 26th, 1893
SEED ALL SOLD.
Catalogue about March 15th.
F. J. MEECH & SON,
Charlevoix, Mich.
Mention American Florist.

1,000,000 TREES
—MORE THAN—
Fruit and Ornamental. SHRUBS, VINES, ROSES, etc., in over 1,000 Varieties.
New and Rare. Old & Reliable.
Send for our Illus. Catalogues.
W. S. LITTLE & CO. ROCHESTER, N.Y. or 15 E. 41th St. N.Y. City

TUBEROSES.

	Per 100.	Per 1,000
We are headquarters.		
1st size Dwarf Pearl	$1 50	$12 00
2d size "	80	6 50
1st size Tall Pearl	1 20	10 00
Gladioli, extra large, finest sorts	1 25	12 00

H. G. FAUST & CO.,
64 and 66 N. Front St., PHILADELPHIA, PA.
WOODLAWN FARMS, 1,300 ACRES.
Mention American Florist.

T. J. CORBREY & CO.,

45 LAKE STREET,

In Chicago Cut Flower Exchange. **CHICAGO.**

WHOLESALE AND COMMISSION FLORISTS

Now is the time to send in your orders for EASTER FLOWERS.

Our stock will be very large and well selected. We have every facility for shipping promptly and packing goods in the best possible manner.

Consignments Solicited.

HULSEBOSCH BROS.,

BULB AND PLANT GROWERS,

OVERVEEN, near Haarlem, HOLLAND.

Prices on application for the coming season of

ROMAN HYACINTHS,	PAPER WHITE NARCISSUS,
LILY of the VALLEY,	HARRISII LILIES,
LIL. LONGIFLORUM,	TULIPS,
DUTCH HYACINTHS,	CROCUS,
SPIRAEAS,	ROSES, ETC., ETC.

☞ Spring Catalogue now ready. ADDRESS

A. HULSEBOSCH,

P. O. Box 3118. Warehouse 58 West Street,

NEW YORK CITY.

Send for Catalogue of

JAPAN BULBS, SEEDS, AND SHRUBS.

ARAUCARIAS,

AUSTRALIAN Palm Seeds,

CALIFORNIA BULBS AND SEEDS to

H. H. BERGER & CO.

ESTABLISHED 1879. SAN FRANCISCO, CAL.

Mention American Florist.

G. J. MOFFATT,

Manufacturer of

PAPER BAGS AND ENVELOPES

Special attention given to

Seed Bags and Catalogue Envelopes.

NEW HAVEN, CONN.

	Per 100	Per 1000
CARNATIONS, standard varieties	$1 00	$9 00
NEWER KINDS	$1.50 to 2 00	
COLEUS	75	6 00

Send for prices on Chrysanthemums, Alternanthera, Snow Crest Daisy, etc.

JOHN J. CONNELLY, Bryn Mawr, Pa.

WE SELL SEEDS

TO FLORISTS AND DEALERS.

WEEBER & DON,

SEED MERCHANTS AND GROWERS,

114 Chambers St., New York.

Catalogues on Application.

BENJAMIN RIMBAUD, BULB GROWER,

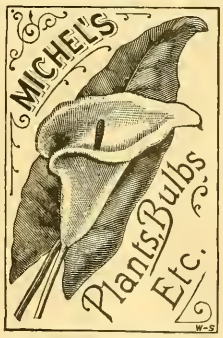
Quartier du Temple, Toulon, var, France.

Cable address Benrimbaud, Toulon.

The largest cultures in the South of France, of WHITE ROMAN HYACINTHS, Narcissus Paper White grandiflora, N. Double Roman, N. Double Von Sion, true pure yellow, and other Daffodils. Lilium Candidum, the largest bulbs. Freesias, Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A. Double Rosette the earliest, etc. Prices on application.

Are You a Fruit or Flower Raiser? For Market or Pleasure—

If so, send for our Circular on Fungicides and Insecticides, which are **cheap** and **reliable.** Agents in every State. **Special Fertilizers** for Fruits, Flowers and Vegetables. Agricultural Chemicals. **W. S. POWELL & CO.,** Chemical Fertilizer Manufrs, **Baltimore, Md.** **S. F. LEONARD, Seedsman, Agent, Chicago, Ill.**



Write for wholesale list.

MICHEL PLANT AND BULB CO.,

ST. LOUIS, MO.

Mention the American Florist when writing to advertisers on this page.

Chrysanthemum Nomenclature.

The following chrysanthemums have had their names changed, because others of the same name are either registered or in the list of the National Chrysanthemum Society of England.

Mr. John May has changed *William Simpson* from Pink Pearl.

Mr. Thos. H. Spaulding has changed *Wyndmoor* from Grover Cleveland.

Mr. Fred Dorner has corrected Autumn Queen to *Autumn Glow*.

Mr. Fred S. Walz has made the change from Vesuvius to *Ætna*.

Mr. David Cliffe has corrected his Magnet and made it *J. H. Cliffe*.

EDWIN LONSDALE.
Sec'y. Am. Chrys. Society.

MIGNONETTE in fine condition was recently received from Andrew Meyer of St. Louis. The flower spikes were 6 to 9 inches long; thickly set with bloom, and the stalks and foliage were unusually robust. A very fine variety, giving evidence of skillful treatment. Mr. Meyer makes a specialty of this flower, and is very successful with it.

OUR special rose number will be issued March 30. It will be an advance on all our former special numbers and will go to every live florist in America. Send in your advertisements early. No increase in rates.

PRINT your spring trade list on this page. It will be not only more effective but cheaper than a list printed and mailed by yourself.

THE AMERICAN FLORIST and *Gardening* together to one address for $1.75. Send orders to the American Florist Co.

TUBEROUS BEGONIAS.

Griffin's unequalled strain. The only Begonias offered that are grown out doors in America. Two first-class certificates at the last meeting of the Society of American Florists. Descriptive list free.

$6.00 per 100, $50.00 per 1,000 for first quality, large tubers, in separate colors.

This quality is better than Imported Tubers at the highest prices.

J. WILKINSON ELLIOTT,
PITTSBURG, PA.
Mention American Florist.

Look Here!

10,000 PEACH TREES, leading kinds, largely Globe and Crawford's Late.

5,000 IRISH JUNIPER, fine, 1 to 5 ft.

Siberian and American Arbor Vitæ, in car load lots, large enouge to make screens as soon as planted. Prices given on application. I am in the market to sell.

W. P. BRINTON, Christiana, Pa.

E. G. HILL & CO.,
Wholesale Florists,
RICHMOND, INDIANA.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

Cape Flowers, new crop in best white quality at $1.25 the lb.; 10 lb. lots, $10 net.

Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 30-in. upwards, at 45c., 50c., 60c., 75c. and $1.00 each, according to length.

Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.

Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.

Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc. For prices consult our

Trade Catalogue, mailed free.

August Rölker & Sons,
136 & 138 W. 24th St., P. O. Station E. New York.

Siebrecht & Wadley,
ROSE HILL NURSERIES,
NEW ROCHELLE, N. Y.

Palms,
ORCHIDS,
Roses,
and New Plants.
FRESH DRACAENA CANES NOW READY.

ORCHIDS.
The Finest Stock in the World.
SANDER'S,
ST. ALBANS,
ENGLAND.
Thirty minutes from London.
Our Mr. A. Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City.

Orchids Cheap as Good Roses.
BRACKENRIDGE & CO.,
Established 1854. Govanstown, Md.
PRICE LIST FREE.
1,000,000 CANE STAKES

New and Rare Plants
ORCHIDS, ETC.
A large collection of Hothouse and Greenhouse Plants, carefully grown at low rates.
A collection of the most beautiful Fancy Caladiums ever offered. Pelargoniums, Etc.
Peonies All the finest old and new.
Orchids A very extensive stock; East Indian, Mexican, Central and South American, Etc.
Hardy Perennials, Roses, Clematis, Phlox, Etc.
New and Standard Fruits; rare and beautiful Trees and Shrubs, Evergreens, Etc.
CATALOGUES ON APPLICATION.
JOHN SAUL, Washington, D. C.

SEND FOR A COPY
—OF OUR—
TRADE DIRECTORY
AMERICAN FLORIST CO., CHICAGO.

While we're Waiting

For "Thorpe's Ideal"—and it's coming—let us use the best

Carnations

obtainable. We have them; good, clean, free from "rust", and well rooted—the best varieties now in the market. Our stock of

Coleus

also includes the best sorts for bedding and fancy use. We're sold ahead till April 1 on these, but place your orders at once if you want them early. Send for our Trade List.

ALEX. McBRIDE,
ALPLAUS, N. Y.

The Snow Crest Daisy fills the bill;
Test it any way you will;
However you must grow it cold;
Then its mammoth size will hold.

Every florist should invest
In this Daisy; 'tis the best;
For design work so complete
There's really nothing quite so neat.

CUT BLOOMS, $1 PER 100, POST FREE.

Large stock fine plants all in bud and blooming, 15 for $1.00; 100 for $5.00; sample plant and bloom for 12c. Double fringed petunias, Dreer's, mixed, all colors, stock plants, 3-inch, strong, 60c. per doz.; $4 per 100; smaller from flats, $2.50 per 100; rooted cuttings, $1.10, post free. The florist double white forcing Petunia, white as the driven snow, fringed and delicately scented, valuable for cutting, design work, etc., stock plants, $1 per doz.; from flats, $3 a 100; rooted cuttings, $1.50 per 100. Double Golden Marguerites, the genuine dwarf, large flowered, stock plants, 60c. per doz., $4 per 100; smaller from flats, $2 per 100; rooted cuttings, $1.10, post free. Double Dahlia Sunflower (Helianthus multiflorus), rooted pips ready for potting, 50c. per doz., $2.50 per 100. French Cannas, Fairmount Park strain, reds in variety, dry roots ready for potting, 50c. per doz., $3 per 100; large flowered yellow, mixed, plain blotched, striped; these are extra fine showy kinds 60c. per doz. $4 per 100; a few extra fine bronze-leaved kinds, 60c. per doz. Variegated Vincas, field-grown, 3-inch, $5 per 100; small from flats, $2 per 100. Coleus, Fuchsia, Stevia, Alyssum, double and single, Gem, Feverfew and miscellaneous rooted cuttings, $1 per 100, small pts. $2 per 100. Rooted cuttings per 100 and small plants per doz. post free if desired. Safe arrival and satisfaction guaranteed or money refunded.

Address J. C. GIBSON, Woodbury, N. J.

Rooted Cuttings, Carnations,

Lizzie McGowan, $20.00, Grace Wilder, $12.50, Silver Spray, $15.00, and Hinze's White, $12.50 for one thousand of each.

COLEUS, $8.00 for one hundred. Fuchsias (choice varieties) $5.00 for one hundred.

GERANIUMS, Gloire de France (new French importation) $30.00 for one thousand.

A. J. VREELAND,
JERSEY CITY, N. J.

ONE MILLION

Trees, Shrubs, Decorative Herbaceous Plants, etc. for landscape gardeners, parks, cemeteries and private gardens.
Catalogues free. Prices low.

B. M. WATSON,
Old Colony Nurseries, PLYMOUTH, MASS.

FICUS ELASTICA.

$5.00, $6.00 and $9.00 per dozen.

JOHN BURTON,
Chestnut Hill, Philadelphia, Pa.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

CARNATIONS ❋ AHEAD.

You want the best in the market! We have them, 16 Novelties of '93, and all the STANDARD VARIETIES! Send for our complete Price List.

GEORGE HANCOCK, Grand Haven, Mich.

Rooted Cuttings.

Carnations Hinze's White, Mrs. Fisher, Silver Spray, Jeannette, Grace Wilder, Fred Creighton, Mayflower, Century, Anna Webb, $1.50 per 100; $10 per 1000.

Orange Blossom, Portia, Hector, Florence, American Flag, $2 per 100; $15 per 1000.

Coleus, leading varieties, including the finest Yellow Coleus in cultivation. A new variety equal to Golden Bedder in color, and as good a grower as C. Verschaffeltii, $1.00 per 100; $8.00 per 1000.

Double Petunias in four finest varieties, $2.00 per 100.

Fuchsias, finest named varieties, $1.50 per 100.

Heliotrope $1.00 per 100.

Ageratum, Dwarf, White and Blue, $1.00 per 100.

500 at 1000 rates. Cash with order. 10 cents per 100 extra when shipped by mail.

JAMES HORAN, Florist,
BRIDGEPORT, CONN.

CARNATIONS

ROOTED CUTTINGS.

Puritan, Aurora, Golden Triumph, Grace Darling, Daybreak, Pearl, White Wings, Lizzie McGowan, Louise Porsch, W. F. Dreer, J. R. Freeman,

and many other varieties; fine, healthy stock, ready January and after.

HYBRID PERPETUAL ROSES

500 Paul Neyron, strong plants....$10.00 per 100.
20 other leading varieties .....$10.00 per 100.
$90.00 per 1000.

☞ Send for price list.

WOOD BROTHERS,
Fishkill, N. Y.

W. R. SHELMIRE,
Carnation Grower

AVONDALE, CHESTER CO., PA.

Send for price list of Rooted Cuttings.

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

ROOTED CUTTINGS OF

CARNATIONS

All the leading varieties.
Fine stock Buttercup.

CHAS. T. STARR, Avondale, Chester Co., Pa.

CARNATIONS

ROOTED CUTTINGS.

Send for Price List of all the leading varieties.

WM. SWAYNE,
P. O. Box 226, KENNETT SQUARE, Chester Co., Pa

ROOTED CUTTINGS.

READY NOW.

CARNATIONS.—Lizzie McGowan, Aurora, Golden Gate and Portia.
COLEUS.—Twenty-two tip-top bedders, $7.00 per 1,000.

PETUNIA.—Choice Double $3.00 per 100.
CANNA.—New Dwarf, French varieties at $4.50 per 100, $35.00 per 1,000.

Ready March 27th and later.

CARNATIONS.—Lizzie McGowan, Puritan, Aurora, Grace Darling, Tidal Wave, Daybreak, Fred Dorner, Portia, Louise Porsch, Golden Triumph, Golden Gate, Anna Webb, J. R. Free-man.
COLEUS.—Twenty-two tip-top bedders, $7.00 per 1,000.

GERANIUMS.—Choice collection of named varieties, large percentage Scarlet and Pink, $12.50 per 1,000, $2.00 per 100.
SMILAX.—Transplanted plants,—a rare bargain at $6.00 per 1,000, 75c. per 100.

Stock First-class P ices Reasonable. Write at once.

L. B. 496. **ALBERT M. HERR, LANCASTER, PA.**

Orders Booked Now for My Specialties

FOR 1893.

New Jersey.—A scarlet Carnation hard to beat.....$12.00 per 100
Old Rose.—Old rose pink Carnation. .....$12.00 per 100
Nellie Bowden.—Pure bright yellow Canna.....$60.00 per 100

READY IN FEBRUARY.

Other varieties of Carnations, both old and new

JOHN McGOWAN,
. . . . . ORANGE, N. J.

SEE OUR PRICE LIST

in special carnation number of Jan. 19th, or address

EDW. SWAYNE, Carnationist,
. . . Kennett Square, Pa.

Rooted Carnation Cuttings.

WHOLESALE PRICE LIST NOW READY,

Containing a full list of best new and old sorts, including the Prize takers at MADISON SQUARE and PHILADELPHIA.

Address **H. E. CHITTY, Paterson, N. J.**

ROOTED CUTTINGS of CARNATIONS

By the Wholesale.

Ready now. This is the best time for intending buyers to supply themselves. offer them at moderate prices. Send for Price List. Address

JOSEPH RENARD, Unionville, Chester Co., Pa.

GRACE BATTLES

and over 60 other varieties of

CARNATIONS

offered the Wholesale Trade.

My list embraces the best Standard and New kinds, including some of particular interest to growers of seedlings. Correspondence and personal inspection solicited.

C. J. PENNOCK,
The Pines. Kennett Square, Chester Co., Pa.

VIOLETS.

"LADY H. CAMPBELL."

Well rooted young plants, delivery May 1st, at $5.00 per hundred.

From sand, as soon as rooted, $3 per hundred. Stock free from disease. List of other varieties of violets on application.

H. HEUBNER, Violet Grower,
. . . GROTON, MASS.

Carnation Cuttings.

Healthy stock, well rooted, ready to ship now.

Hinze's White.....	per 100,	$1.25;	per 1000,	$10.00
Grace Wilder.....	"	1.50;	"	12.50
Portia.....	"	1.50;	"	12.50
Anna Webb.....	"	2.00;	"	15.00
Lizzie McGowan..	"	2.00;	"	15.00
W. F. Breer.....	"	2.50;		

THOMAS DeWITT,
(Successor to DeWitt Bros.) **BRISTOL, PA.**

ROOTED CUTTINGS

Of the Best Old and Most Promising new varieties of

CARNATIONS.

Write for a catalogue and send list of wants for an estimate.

J. J. Styer,
CONCORDVILLE, PA.

ROOTED CARNATION CUTTINGS.

NOW READY.

Of the best old and new varieties now in cultivation, in small or large quantities. Send for estimate of wants or price list.

ISAAC LARKIN, Toughkenamon, Pa.

Easter Lilies From Bermuda.

We recently received a circular, which we understand is being quite widely disseminated among wealthy flower buyers, offering retail shipments of lilies from Bermuda at a very low price. We have heard complaints, during previous years, that the Bermuda bulb growers were shipping flowers here for the wholesale market, especially around Easter, but judging by this circular they are determined to secure the retail market too.

Setting aside any question as to the trade morality or justice in the matter we must look at it in this light. These people obtain their chief revenue from the sale of bulbs, to be bloomed here for our market. Not content with this they now attempt to destroy that market by shipping here their low priced flowers. Now, the question resolves itself to a very simple matter; either they must give up the idea of shipping flowers here, or we must give up buying their bulbs for the purpose of forcing, since our market will not support both. If Bermuda can supply our markets with lilies at a much lower rate than we can force them here it would be folly to buy the bulbs for purposes of competition.

The bulb growers had best consider the old saying about the impossibility of eating the cake and still retaining it in the larder for future consumption.

PREPARE your advertisements now for our special rose number to be issued March 30. We must have copy by March 23, at the latest and as much earlier as possible.

"CHRYS-COLA"

ROOTED CUTTINGS

COLEUS.

Ten best varieties, 75c. per 100; $6 00 per 1,000.

CHRYSANTHEMUMS. L. Boehmer, Jessica, L. Canning, Excellent, Puritan, Gloriosum, Kioto, G. P. Rawson, Mrs. Fottler, 25c. per dozen, $1.75 per 100. Mrs. E. D. Adams, Harry May, Roslyn, W. A. Manda, 60c. per dozen, $4.00 per 100.

FUCHSIAS. Black Prince, C. Blanc, W. E. Wait, Noveau Mastadonte, Minnesota, 18c. per dozen, $1.00 per 100.

S. B. FIELD, Roselle, N. J.

Primrose Seed

For extra large plants, sow the seed beginning of April. We offer a limited quantity of last year's seed in prime condition; put up for florists in packets containing ten best selling sorts, 400 seeds, price per packet $1.00; 1,000 seeds, $2.00.

New Seeds will be ready 10th of May.

HENRY S. RUPP & SONS,
SHIREMANSTOWN, PA.

COLEUS AND GERANIUMS

Cuttings and potted plants.
Wholesale and Retail. . . . .

CHAS. A. BAIRD, Manalapan, Mon. Co., N. J.

EVERY FLORIST SHOULD TRY

VICK'S NEW WHITE BRANCHING ASTER

THE FLORISTS FAVORITE

Strong Grower. Long Stems.

Flowers 4 in and over in diameter.

Petals broad, long, twisted and curled.

In bloom after all other varieties are done flowering.

PURE WHITE.

Our local florists who saw them in bloom last summer, say:

"Saw the Aster in bloom in fall and know they were fine." F. J. KELLER.

"Please send us 8 packets of the New White Branching Aster, we saw on your trial grounds last summer. Think it the finest Aster for florists' use without any exception we have ever seen." SALTER BROS.

We have the pleasure of introducing to flower lovers a variety of Aster having some peculiar and very valuable characteristics. The plant is a strong grower, and its tendency to form numerous branches is very marked. The plant continues to grow *later in the season than any other variety* with which we are acquainted, and blooms correspondingly late, thus giving its crop of flowers in late autumn, a season when there is always a scarcity of bloom.

The flowers are borne on very long stems and are pure white, being *four inches and more in diameter.* The petals are broad, long, and many of them more or less twisted and curled in such a manner as to give the blooms the appearance of large, loose and graceful Chrysanthemums. The resemblance is so great that nearly everyone would so consider them when seen as cut flowers.

All florists who have seen them greatly admire them, and there is no question that they will quickly find a place for themselves in the flower trade, anticipating, as they do, the Chrysanthemum season by a month or six weeks. *Price, per packet, 25 cents.*

If you have not seen a copy of Vick's Floral Guide for 1893—The Poet's Number—send for a copy to-day, and read about the new novelties.

JAMES VICK'S SONS, 541 East Ave. Rochester, N. Y.

Mention American Florist.

TWO RARE TIGER FLOWERS.

Tigridia Pulchella.

A new species about a foot high with purple white and yellow flowers. *Tigridia*, species (probably Tatra) with good sized violet-purple flowers 10 to 15 inches high. Both easy of culture. Price for each, strong flowering bulbs, 75c. per doz., $1.00 per 100, by mail. Many other rare Mexican bulbs.

F. H. HORSFORD, - Charlotte, Vt.

IPOMÆA PANDURATA,

(Day Blooming Moon Flower.)

Northern grown, fresh and sound, per 1,000, $20.00, 500 at 1,000 rates; per 100, $2.50, 50 at 100 rates. Barr's Mammoth Asparagus, one year, per 1000, $2.50. Conover's Colossal, 2 years, $3.00 per 1,000.

JAMES FROST,
Greenville, Darke Co., O.

ROOTED CUTTINGS.

MARIE LOUISE VIOLETS.

Healthy Stock.

Ready after March 17th.

E. P. HOSTETTER,
Manheim, Lancaster Co., Pa.

Tuberous Begonias.

Seedlings, best strain, Single or Double, mixed colors per 200, $3.00. Another strain, Singles, separate colors, $3.00 per 100, mixed, $2.50, sent by mail

BRAUER & RICHTER, McConnellsville O

CROZY CANNAS.

WE ARE

HEADQUARTERS

For all the Novelties, and in addition control **EXCLUSIVELY** several grand varieties which we now offer for the *first time.*

We will not be undersold on any of the list.

J. C. VAUGHAN,

New York: 26 Barclay Street.

CHICAGO: P. O. Box 688.

GREENHOUSES: Western Springs. ▲ ▲ ▲

CHEAP NAMED DWARF FRENCH CANNAS.

There is a demand for cheap Canna stock, something that can be sold low and that is good. Having large stocks of the more valuable and higher priced novelties in Cannas we offer the following sorts at these exceptionally low rates. Many of the varieties are worth much more than the price we charge for them and are the best of Crozy's French Cannas of the last three or four year's introduction; potted up and in bloom will meet with a ready sale and be found very profitable; will pay you to discard old stocks and substitute these. Antonin Crozy, Antoine Chantin, Admiral Courbet, Childsii, Enfant Du Rhone, Goury, Isaac Casati, Jules Chretien, Kaiser William II, Louise Chretien, Mme. Antoinette Allamagny, Mme. Oriol, Prof. David, Petite Jeanne, Princess De Lusignan, Souv. De Jeanne Charreton, Statuaire Fulconis.

Price $7.00 per hundred; $60 00 per thousand.

F. R. PIERSON COMPANY, TARRYTOWN-ON-HUDSON, N. Y.

DO YOU WANT

	Per 100
ALTERNANTHERAS rooted for $1 per 100; $8 per 1000	
COLEUS, 2 and 2½-in. pots	$ 4.00
GERANIUMS, single red, 2 & 2½-in. pots, mxt.	3.50
" double red, 2 & 2½-in. pots, mxt.	3.50
" in 3 and 3½-in. pots	5.00
BEGONIAS, stock plants, 4 and 5-in. pots	12.00

Rex and other best varieties.

If so, order soon of the

ELGIN ROSE CO.,

TELEPHONE 8.

519 Chicago Street, - - ELGIN, ILL.

A Very Valuable Opportunity

is given for the sale at the World's Fair Chicago, of an article which is of great use in Horticulture. The same yields a very great profit and will be bought by every owner of a garden. No agents. Address,

JOSEPH DEMMING,
NEUSS, GERMANY.

FOR SALE.

Alternanthera Paronychioides Major, Aurea Nana.

Rosea, New, per 100, $3.00, 200 for $5.00; Geranium Mme. Sallerol, strong, per 100, $3.00; Pelargoniums, strong 2-inch pots, per doz., $1.00 free by mail.

Heliotropes, 4 varieties, per 100, $3.00.

Pansies in bud and in bloom, out of cold frames, per 100, $2.00 by express only, too large for mail.

Achillea, The Pearl, strong rooted cuttings, per 100, $1.00 free by mail.

C. G. NANZ,
OWENSBORO, KY.

BY THE THOUSAND.

Araucaria excelsa, Aspidistra, Palms, Phormiums, Laurel, Bays, Crowns and Pyramids of all sizes.

Packing free for Cash with order.

THE NURSERIES. JULES DE COCK,
LEDEBERG, near Ghent, BELGIUM.

A Specialty Bulb Begonias, extra vars. at $3 per 100.

Mention American Florist.

ROOTED CUTTINGS.

Alternanthera, Versicolor, Tricolor and Aurea Nana	per 100	.50
Alternantheras Paronychioides	"	.75
Coleus, best old and new	"	$1.00
Fuchsia, leading varieties	"	1.50
Heliotrope, leading varieties	"	1.50
Mexican Primrose	"	1.50
Parlor Ivy, variegated	"	1.50
PLANTS.		
Anthericum Picturatum	per doz.	$1.00
Fuchsia, Trailing Queen	"	.75
Begonia, assorted	per 100	4.00
Coleus, assorted	"	3.00
Carysanthemums, leading kinds, our selection	"	3.00
Heliotrope, assorted	"	3.00
Petunias, double, assorted	"	4.00
Anthemus Tinctoria, a good bloomer	"	4.00
Anthemus Coronaria	"	4.00
Solanum Jasminoides Grandiflora	"	4.00
" Jasminoides var	"	5.00
Var. Parlor Ivy	"	4.00
Fuchsia, best varieties	"	3.00
" Storm King and Phenomenal	"	4.00
Echeveria Glauca	"	4.00
" Extensa Globosa, for centers, plants six inches across	each.	.25

Price List on Application.

ROBT. S. BROWN & SONS,
Box 99, Kansas City, Mo.

Toronto.

The Gardeners' and Florists' Association held an exceedingly lively special meeting last Tuesday. The attendance must have nearly beat the record I think, every chair being occupied. Mr. W. Muston was down for a paper on carnations, but excused himself on the ground that so much had been said about them lately in the papers there was nothing left for him to say. He, however, gave instead a very interesting paper on chrysanthemums. Mr. M.'s opinion is that they do not pay at the prices that either plants or bloom are sold in this city and there was a long discussion on this point, the general opinion being that mums have their place and will continue to be grown.

Then several members having come to the meeting loaded for carnations it was decided to have a discussion on that subject, and Mr. H. J. Cole, foreman to Mr. J. H. Dunlop, who had brought down specimens of many kinds, after much perseverance on the part of the president and vice gave his method of culture and much other information which it is desirable for a carnationist to know.

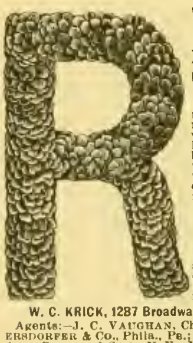
It was decided to hold the annual dinner of the association on the 22nd of this month. A smoker had been talked about but the members on motion of Mr. H. Blunt unanimously resolved to have "a good hot dinner in good style."

A paragraph having appeared in a horticultural contemporary of yours attributing annexation proclivities to the president a vote of censure on him was moved and seconded. The president having left the chair most emphatically denied the allegation and was pretty rough on the allegator and stated that he would certainly be heard from in the columns of the above mentioned contemporary. However, as the penalty for these treasonable tendencies had been fixed at "cigars all round" the motion carried unanimously, the president remarking that there might be some difficulty in enforcing it.

Mr. Low, of Messrs. Hugh Low & Son, Clapton, England, was in the city last week.

Weather improving, snow disappearing.

E.



W. C. KRICK'S

PATENT

Florists' Letters, Etc.

Highest Award wherever exhibited.

These Letters are made of the best immortelles, wired on wood or metal frames having holes drilled in them to insert toothpicks, by which to fasten them in the design. All infringements prosecuted.

2-inch Letters, $3 00 per 100. Postage, 15c. per 100.

Before purchasing send for free sample and Catalogue and compare with any other letter in the market.

W. C. KRICK, 1287 Broadway, BROOKLYN, N. Y.

Agents:—J. C. VAUGHAN, Chicago, Ill.; H. BAYERSDORFER & Co., Phila., Pa.; N. STEFFENS, N. Y.; AUG. ROLKER & SONS, N. Y.; ED. S. SCHMID, Washington, D. C.; JAMES VICK'S SONS, Rochester, N. Y.; T. W. WOOD & SONS, Richmond, Va.; J. A. SIMMERS, Toronto, Ont.

CANNAS

CHRYSANTHEMUMS.

Lowest Prices for Choice Stock. List Free.

T. H. SPAULDING, Orange, N. J.

New Hardy Pink. **"HER MAJESTY."** Originator, Hopper.

This is the most promising novelty for many years. It has carried off first Honors wherever exhibited, and will be of the greatest value to the American Florists. It is far superior to anything we have in the hardy pink line. The flowers are of the purest white, with stout, long stems and the most exquisite perfume, and is a profuse bloomer.

It will be invaluable for forcing in winter, and resembles more of a Carnation.

We take great pleasure in introducing this charming novelty to the American Florists at the following price:

10 Strong Young Plants	$ 2.00
100 " " "	14.00

Address, **C. EISELE & CO.,**

8 Street Station. **114 Jefferson Street, PHILADELPHIA, PA.**

Orders filled strictly in rotation. Cash with order.

The three leading Florist Flowers:

CHRYSANTHEMUMS, CARNATIONS AND ROSES.

ALL THE NEW AND SELECTED STANDARD VARIETIES. . . .

My stock of all are as fine as can be produced at reasonable rates.
Complete list of these will be mailed to all applicants in the trade.

JOHN N. MAY, Summit, N. J.

Mention American Florist.

CYCAS REVOLUTA.

The largest and BEST selected stock of Cycas Revoluta (fronds and roots cut off, TRUE, long leaved variety) now on hand. CYCAS CIRCINALIS delivered from April 1st.

Lilium Auratum, Lilium Spec. Album, Lilium Spec. Rubrum, Nerine Japonica, Lilium Krameri, etc., in great quantities, imported for spring trade.

Price on application.

F. GONZALEZ & CO.,

303-312 WAYNE STREET, CRESCENT AVE., SAN FRANCISCO, CAL.

N. B. Fresh Cycas leaves for sale by the thousand.

C. C. Abel & Company

P. O. Box 920, **NEW YORK,**

FLORIST'S, NURSERYMEN'S AND SEEDSMEN'S AGENTS,

— For the following —

WELL KNOWN AND RELIABLE HOUSES,

For whom we solicit your orders:

C. G. VAN TUBERGEN, Jr., Florist and Seedsman, Haarlem, Holland. Choice Dutch Bulbs, Novelties, etc.

PIERRE SEBIRE & SONS, Nurserymen, Ussy, France. Roses, Evergreens, Fruit and Forest stocks.

ERNST RIEMSCHNEIDER, Florist and Seedsman, Altona, Germany. Berlin Lily of the Valley a specialty.

ERNEST RIEMSCHNEIDER, Florist and Seedsman, Altona, Germany. Choice selections of German Flower Seeds. Also of Palms, Grass and Garden Seeds. Best Sugar Beet Seeds a Specialty.

Catalogues (mention which) free on application when received for distribution.

All orders for these houses should be plainly written and addressed to us.

FOR SALE OR EXCHANGE.

Peony roots, white, pink, maroon and rose, good divided roots, $5 per hundred. Full size, two year clumps, $18 per hundred. Will sell for cash or exchange for small stuff. Write for particulars.

WANTED.

Acacia Riceana, Bambusa Nana, Azara Microphylla. Anyone having one or more of the above please send description of stock and state price.

THE WISCONSIN FLOWER EXCHANGE, Milwaukee, Wis.

FOR SALE.

10,000

Rooted Cuttings of Alternanthera

P. major and A. nana, 90c. per 100; $7.00 per 1000. Fine stock.

C. K. HOFFMEYER, Mansfield Valley, Pa.

COLEUS ROOTED CUTTINGS

The Best Twelve Bedders.

Also, Alternanthera Aurea Nana and different Bedding Plants. For prices, address

C. F. SCHNEIDER, Oconomowoc, Wis.

Mention American Florist

IMMORTELLES

WHITE.....Per Dozen, $3.25; per 100, $23.25. SCARLET.....Per Dozen, $3.25; Per 100, $23.25.
PURPLE.....Per Dozen, $3.25; per 100, $23.25. YELLOW.....Per Dozen, $2.50; Per 100, $19.50.

Above price is in New York. Add 75 cents per 100 for price f. o. b. Chicago.

Chicago. J. C. VAUGHAN, New York.

TUBEROUS ROOTED BEGONIAS.

Best selling stock for Retail Florists. Order now and start into growth for early sales. Sell like hot cakes when in bloom. Try them you never have. If you have, then you know it. In large quantities; choicest quality.

SINGLE, in 5 separate colors, white, yellow, scarlet, pink and crimson.....$6.00 per 100; $50.00 per 1000.
DOUBLE, in 5 separate colors.....$16.00 per 100. (Can be mailed for 30 cts. per 100.)

F. R. PIERSON COMPANY, TARRYTOWN ON THE HUDSON, NEW YORK.

CHRYSANTHEMUMS.

Fine young plants of the following varieties from 2½-in. pots. These plants are neither drawn up nor hard-wooded:

George Savage, Hicks Arnold, Harry May, Ada H. Le Roy,
Viviand Morel, Lillian Russell, Roslyn, Victor,
Mrs. R. C. Ogden, Logan, Wm. Falconer, Margaret Graham,
Mrs. A. J. Drexel, Rosstrevor, Leala, Mrs. Wm. F. Dreer,
Ada McVicker, Col. Wm. B. Smith, Mrs. E. D. Adams, Ruth Cleveland,
Mrs. J. N. Morrissy, Geo. W. Childs, Emma Hetzeroth, Mrs. W. S. Kimball.

THE ABOVE 10 CENTS EACH.

Robert Flowerday, Violet Rose, W. H. Lincoln, Louis Boehmer,
John Goode, Gold, Minnie Wanamaker, Yonitza,
Mistletoe, Source d'Or, H. E. Widener, Advance,
Eda Prass, E. G. Hill, Excellent, J. C. Vaughan,
Col. H. M. Bois, Ada Spaulding, L. Canning, Gloriosum,
Waban, Mrs. Irving Clark, Thorpe Junior, Potter Palmer,
J. W. Gerard, Jessica, Puritan, Ferdinand Feral,
Etoile de Lyon, W. K. Harris, Aug. Swanson, Neesima,
R. C. Ringston, V. H. Hallock, Mrs. John Westcott, Cullingfordii,
Elmer D. Smith, Rohallion, John Thorpe, Mrs. Fottler,
Ivory, Domination, Kioto, Mrs. J. C. Henszey.
Pelican, Mermaid,

THE ABOVE 5 CENTS EACH.

WILLIAM SCOTT, MAIN AND BALCOM STREETS, BUFFALO, N. Y.

100,000 CHRYSANTHEMUM PLANTS,

$6.00 a 100. Choicest up to 1891 Novelties.

SHERWOOD HALL NURSERY CO.,

MENLO PARK and SAN FRANCISCO, - CALIFORNIA.

ROSES AND CARNATIONS.

The Largest and Finest Stock in the Northwest ever offered at the following prices:

ROSES—Perles, Hoste, Sunset, La France, Mermet, Bride, C. Soupert, Niphetos, from 2¼-inch pots, $4.00 per 100
Mme. Watteville, Albany, Pierre Guillot, Meteor, from 2½-inch pots..... 5.00 per 100
American Beauty, from 2½-inch pots..... 7.00 per 100
CARNATIONS—Silver Spray, Lizzie McGowan, Hinze's White, Hector, Portia, Garfield, Grace Wilder, Fred. Creighton, Mrs. E. G. Hill, from 2-inch pots..... 3.00 per 100
Rooted Cuttings of all varieties offered..... 2.00 per 100

Cut Flowers, Roses, Carnations Lilium Harrisii and Smilax at lowest market prices. Telegraph orders promptly attended to. CHRIST HANSEN, Wholesale Florist, ST. PAUL, MINN.

CLEMATIS.

	Doz.	Hundred
2 Year Choice Assortment	$3.00	$25.00
1 " " "	2.00	15.00
H. P. Roses, Choice named kinds	1.50	10.00
Monthly " " " "	1.25	8.00
Daisy Snowflake, strong plants	.50	3.00
Dahlias, field grown, choice named	1.25	8.00

F. A. BALLER, BLOOMINGTON, ILL.

HEADQUARTERS FOR WATER-LILIES

SEED TUBERS AND PLANTS.

Place your orders early if you wish to secure good stock of charming yellow Water Lily, N. Chromatelia plants. 1st size, $1.00 each, $10 doz.; 2d size, 75c each, $8.00 per doz. Also, the new French and other new hardy varieties. Send for price list.

Wm. Tricker, DONGAN HILLS, NEW YORK.

ROOTED RUNNERS.

Marie Louise Violets: Healthy Stock.

GEO. N. SAYLES,
40 Bradley Street, Watertown, N. Y

PLANTS. FLOWERS.

Mendenhall, the Pioneer Florist of the Northwest, always to the front with the finest, healthiest, cleanest stock of Roses, Carnations, Smilax and all kinds of Bedding plants to be found. Prices low. Send for catalogue. Cut flowers at wholesale and retail. The pure air of Minnesota is good for man, beast and plants, and Minneapolis is the place, and Mendenhall Greenhouses is the name to address for anything good in the florist line.

MENDENHALL GREENHOUSES, MINNEAPOLIS, MINN.

ROOTED CUTTINGS

and 2-in. stuff our specialty. What do you want? Healthiest Verbenas in the West $2.00 per 100.
Euclid Ave. Greenhouses, 38 Euclid Ave., Kansas City, Mo.

CHRYSANTHEMUMS

We Offer for a Short Time the Following Standard Sorts. The Plants are in the Pink of Condition.

					Per 100
W. H. Lincoln,	stock plants,	4-in pots			$15.00
H. E. Widener,	"	"	"	"	25.00
Ivory,	"	"	"	"	25.00
Domination,	"	"	"	"	15.00
Mrs. Geo. Bullock,	"	"	"	"	15.00
L. Canning,	"	"	"	"	15.00
W. H. Lincoln,	"	"	2-in.	"	3.00
H. E. Widener,	"	"	"	"	5.00
Ivory,	"	"	"	"	4.00
Domination,	"	"	"	"	3.00
Mrs. Geo. Bullock,	"	"	"	"	3.00
L. Canning,	"	"	"	"	3.00
Potter Palmer,	"	"	"	"	5.00
Ruth Cleveland,	"	"	"	"	5.00
Mrs. E. D. Adams,	"	"	"	"	6.00
Minnie Wanamaker	"	"	"	"	5.00
Mrs. Irving Clark,	"	"	"	"	3.00
Louis Boehmer,	"	"	"	"	3.00
Mrs. B. Harrison,	"	"	"	"	3.00
Kioto,	"	"	"	"	3.00

Rooted Cuttings ready Feb'y 25th of the following Varieties:

Mrs. Geo. Bullock, L. Canning, Kioto, Domination, Mrs. B Harrison, Louis Boehmer, at.....$1.50 per 100
H. E. Widener, Ivory.....$2.50 per 100

25 at 100 rate. Packing free.

JOHN IRVINE CO.,

Bay City, Mich.

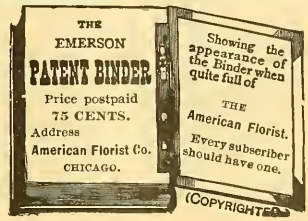
P. S. Adiantum Capillus Veneris, 2-inch, a fine lot now ready for shipment at $5 per 100. Nephrolepis Exaltata, 3-inch, $7 per 100.

CHRYSANTHEMUMS.

ROOTED CUTTINGS.

Lincoln, Ada Spaulding, Domination, L. Boehmer, Rohallion and 20 other good market sorts, $1.50 per 100; Jessica and Ivory, $2.50 per 100. Ready for delivery January 15th.

Address **J. G. BURROW, FISHKILL, N. Y.**



Worcester, Mass.

The first show of the Worcester County Agricultural Society was held March 9. Although it rained hard all day the show of flowers was above the average in quantity and excellent in quality. Hyacinths were fine; H. F. A. Lange took first; Mrs. Chase, second. Primulas were excellent, H. A. Jones capturing first on both sinensis and any other variety. Of cinerarias, M. F. Brierly showed four elegant plants and took first. The finest cyclamen ever shown here was on exhibition, Jones taking first on both single and four plants; A. A. Hixon, second. On richardia, Jones was again an easy winner; Edward Hall, second. The exhibit of Azalea Indica, while not large, was very fair, those shown by C. D. Thayer and Brierly being excellent specimens; they took the honors.

In cut flowers there were only three exhibits, Lange taking first. First on bouquet also went to Lange.

The next exhibition takes place April 13. A.

Foreign Notes.

Pteris regina cristata is a variegated fern, resembling in habit P. serrulata, but the long slender pinnæ are crested at the apex, and drooping in habit. The fertile fronds have the longer stalks, carrying the pinnæ erect. The variegation is silvery in color, pervading the entire pinnæ the veins only being green. This plant is easily grown, and can be raised freely from spores.

A variegated form of Nicotiana colossea (syn. N. tomentosa) has now appeared, being exhibited by M. Sallier at an exhibition of the French National Horticultural Society. The variegation consists of a broad marginal band; it is described as a very handsome thing.

Chorozema Lowi is a variety of comparatively recent introduction; being an exceptionally free bloomer and easily grown it should be valuable to the trade. It resembles C. Chandleri, but its bloom is rich-colored, and the plant more bushy.

Association "Flora"

BOSKOOP, HOLLAND.

Now on hand in New York:
CLEMATIS, 3 Years, per 100, $30.00
H. P. ROSES, for forcing, " 9.00
In the best variety, as Alfred Colomb, Anna de Diesbach, B Rothschild, Fisher Holmes, Gen. Jack, La France, Mme. G. Luizet, Mme. Plantier, Magna Charta, Paul Neyron, P. C. de Rohan, Merville de Lyon, Perle des Blanches, Ulrich Brunner and other sorts. Azaleas, Rhododendrons, Spiræas, etc. We also have Palms, Dracænas, Arancarias and Bay Trees at our nurseries in Holland. Catalogue on application.

P. OUWERKERK, 206 Cambridge Ave.,
JERSEY CITY, N. J.

Mention American Florist.

MAGNOLIAS

OBOVATA GRACILIS AND PURPUREA.

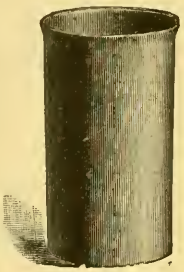
Fine, bushy plants, 3 to 8 feet, from $25.00 to $200.00 per 100.
Send for descriptive catalogue and wholesale price list free to all in the trade.

SAMUEL C. MOON,
MORRISVILLE, Bucks Co., PA.

No Trees of 1st quality can ever be sent by mail. Mayhap you know it. By freight, prepaid if preferred, we ship safely 4, 5, or 6 ft. trees; 2-yr. Roses of rare excellence—everything! You actually pay less than for the puny stuff. 1,000 acres Nurseries. 20,000 acres Orchards. Exact information about trees and fruits. Stark Bros., Louisiana, Mo.

CUT FLOWER VASES

Great Reduction in Prices.



On and after this date (Feb. 2, '93) the following schedule of prices are in force:

No.		Each.	Dozen.
0—8	in. diam. by 13 in. deep,	.40	$4.00
1—5½	in. diam. by 10 in. deep,	.35	3.50
2—4½	in. diam. by 9 in. deep,	.30	3.00
3—4	in. diam. by 6 in. deep,	.25	2.50
4—3	in. diam. by 4½ in. deep,	.20	2 00

The above quotations cancel the prices in our trade list at page 45. Kindly make note of same on the catalogue sent you, as we will not issue a new list for some little time. These vases have the appearance of polished mahogany; they are neat, attractive and durable, and at the low figure now prevailing **Exceedingly Cheap.** They will consequently be more popular than ever. Please note that we offer them **AT FACTORY PRICES.** . . . . .

JOHN GARDINER & CO., Seedsmen, PHILADELPHIA.

TREES FRUIT AND ORNAMENTAL,

SHRUBS, EVERGREENS, ROSES, HARDY PLANTS, FOR SPRING PLANTING.
Immense Stock. Order now. 160 Page Catalogue Free.

ELLWANGER & BARRY, Mt. Hope Nurseries, ROCHESTER, N. Y.

THE CATALOGUE OF NEW PLANTS ETC.,
OF
V. LEMOINE & SON, NANCY, FRANCE,
Can be had on application from their sole agent,
C. RAOUX, 296 PEARL STREET, NEW YORK.

100,000 VERBENAS. THE CHOICEST VARIETIES IN CULTIVATION.

Fine pot plants, $2.50 per 100; $20 00 per 1000. Rooted Cuttings, $1 00 per 100; $8 00 per 1000.
NO RUST OR MILDEW.
Packed light, and satisfaction guaranteed. Send for circular. . . .
Our sales reached nearly 250,000 last year, and we can assure our customers that our plants are fully equal, and assortment of varieties surpass those of last year.
J. L. DILLON, Bloomsburg, Pa.

Rooted Cuttings of Evergreens, Hardy Flowering Shrubs and Hardy Perennials (Achillea, iberis, etc.) raised on contract for spring delivery. SEND LIST OF WANTS.
. . . ISAAC C. ROGERS, MOORESTOWN, N. J.

SPLENDID STOCK.

		Per 100
Althernantheras P. Major, aurea nana	2-in. pots,	$2.00
Begonias, flowering sorts	2½-in. "	4.00
Coleus, in 12 splendid sorts	2-in. "	2.50
Cyclamen, in bud or bloom	3½-in. "	8.00
Chrysanthemums, 40 splendid sorts	2-in. "	3.00
Dahlias, large roots, 36 varieties	"	5.00
Geraniums, double and single sorts	2½-in. "	4.00
" silver leaved sorts	2½-in. "	4.00
" ivy leaved sorts, including Jeanne d'Arc	2½-in. "	4.00

HANS NIELSON, St. Joseph, Mo.

ASTER SEED

Mary Semple, (Pink), and Semple's White (white), mixed. Finest strain on the market. Price, $1 per pkt., $5 per oz.

JAMES SEMPLE, FLORIST
Box 2 BELLEVUE, PA.

Azalea Indica

In bud or bloom, from 75c. to $1.50 each.

LILIES FOR EASTER,
HARRISII, LONGIFLORUM,
CANDIDUM, RHODODENDRONS.

SEND FOR PRICES.

WILLIAM A. BOCK,
NORTH CAMBRIDGE, MASS.

Double White Primrose produces large quantities of firm white flowers, (valuable for all kinds of cut flower work), every florist should have it; 2, 3, 4, 5-in. pots @ $8, $10, $12 and $15 per 100 plants in full bloom.
Large assortment of the best Roses, Carnations, Chrysanthemums, M. H. Fern, Coleus, Violets, Geraniums, etc., for florists use. Send for trade price list to
HENRY SMITH,
130 Monroe St. Grand Rapids, Mich.

Always mention the AMERCAN FLORIST when writing to advertisers.

LITTLE'S ANTIPEST.

— A —

Valuable Discovery of the 19th Century.

SILVER MEDAL AWARDED

— BY THE —

CALIFORNIA STATE FAIR OF 1890.

This preparation Is a sure destroyer of the **Scale, Wooly Aphis** and **Insect Pests** of any and all descriptions. It may be as freely used in the conservatory, garden and greenhouse as in the orchard or vineyard. It is non-poisonous and harmless to vegetation when diluted and used according to directions. It mixes instantly with cold water in any proportion. It is **Safe, Sure** and **Cheap.** No fruit grower or florist should be without it.

Send for Circulars and Price List.

R. W. CARMAN, General Agent,
291 AMITY STREET,
FLUSHING, Queens, Co., N. Y.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

Clear Cypress,

from bottom gutter up ia my specialty.

Lyman Felheim,
ERIE, PA.

J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS •

Greenhouse Material,

LOUISVILLE, KY.

CUTS!

Wood Engraving,
Zinc Etching,
Half-Tone,
Wax Engraving, Photo-Engraving,
Designing.

MANZ & CO.,
183 Monroe Street, CHICAGO. ENGRAVERS.

STOTT'S SYSTEM OF SPRAYING SAVES PLANTS-FLOWERS-FRUITS.

KILLMRIGHT KILLS, INSECTS AND MILDEW

STOTT'S DISTRIBUTER CHARGED WITH KILLMRIGHT, CONNECTED WITH FAUCET READY FOR USE WORKS EQUALLY WELL WITH A GARDEN ENGINE.

TOTT'S PRAYER

STOTT'S SYRINGE

CELL "A" CONTAINS THE KILLMRIGHT

END FOR CIRCULAR AND TESTIMONIALS.

STOTT GARDEN IMPLEMENT COMPANY
136 LIBERTY ST. NEW YORK.

NEPONSET • FLOWER • POTS

of Waterproof Paper, light, durable, unbreakable and cheap.

Tomato Growers have used them with success and proved their appreciation by repeated orders.

Cabbage Growers have tried them and duplicated their orders.

Market Growers of Verbenas, Alyssum, Coleus and other plants, which do not shun moisture, have used them extensively in repeated seasons.

Recommended for light and safe packing of tender and valuable plants, for the marketing of Ferns, Dutch Bulbs, Lily of the valley and the like.

Cost about 40 per cent less than earthen pots, and weight considerably lighter, thus saving in first cost and freight.

For Price List and further particulars address

Wholesale Agents:

AUGUST ROLKER & SONS, Station E, New York.
R. & J. FARQUHAR, - - - - Boston, Mass.

Who furnish samples, by mail, postpaid, on receipt of

	10 cts.	11 cts.	14 cts.	17 cts.	22 cts.	40 cts.	60 cts.
For 1 dozen	2¼-in.	2½-in.	3-in.	3½-in.	4-in.	5-in.	6-inch pots.

F. W. BIRD & SONS, Sole Manufacturers, EAST WALPOLE, MASS.

C. HENNECKE CO.

Milwaukee, Wis.

Price list of our Standard Greenhouse Pots:

1 3-4 inch,	per 1,000,	$3.00	3 1-2 inch,	per 1,000	$6.75
2 inch,	"	3.50	4 inch,	"	8.00
2 1-2 inch,	"	4.00	5 "	"	13.50
3 inch,	"	5.50	6 "	"	22.50

The superiority of our pots is acknowledged by all who have used them.

WRITE FOR OUR CATALOGUE OF

Fancy Pots, Vases, Jardinieres, Wire Designs,
ETC., ETC.

CATALOGUE PRINTING.
ELECTROTYPING.

Done with expert ability for Florists Nurserymen, Seedsmen. Write to

J. Horace McFarland Co.,
HARRISBURG, PA.

Substitutes for Glass in Greenhouse Roofs.

In Bulletin No. 49 of the Cornell University Agricultural Experiment Station Prof. L. H. Bailey says:

"There is much inquiry for some cheap substitute for glass for greenhouses, and various preservative preparations are recommended for the treatment of cloth and paper to be used in roofing. We have tried paper one season, and find both to be entirely unsatisfactory for a winter roof in this climate. They are cold, dark and not durable. For summer or late spring use oiled muslin is fairly satisfactory. Plants which require a heavy shade in summer can be grown to advantage under such a roof. In the summer of 1891 we found a cloth-roofed house to be an excellent place for flowering the tuberous begonias. Cloth roofs, with ordinary oil treatment, last less than a year, and paper is so easily torn and punctured by drifting twigs that we consider it nearly useless for roofs. It will also tear after a short time by a heavy wind from the inside if a door or ventilator chances to be open. The cost of a few annual roofs of this character will pay for a glass roof. Even if the cloth were to last for two or three years, it would soon become very dark from a collection of dirt and the growth of mildew.

"Our first experience with these covers was the use of paper in the fall of 1890. The paper used was a thin white, stiff, architect's drafting paper known in the trade as 'Economy.' This was laid over the sash-bars and was held down by the caps used for holding butted glass. It was then thoroughly saturated with raw linseed oil. It had been in place but a short time when an ambitious cat attempted to walk over it, and made a hole at about every other step. After a few weeks of vexation, the paper was removed, and a medium quality of unbleached muslin cloth was substituted, being laid on in the same way. This muslin was oiled twice with raw linseed oil. This was in December. The cloth lasted until late spring, but became very black and dirty towards the last. In the fall of 1891, another covering of the same muslin was laid, and this received three coats of raw oil. This lasted until the next summer.

"This roof is now covered with glass"

THE BEST POTS.
THE CHEAPEST.
THE LOWEST FREIGHT RATES.
THE BEST OF PACKING.
THE LARGEST POTTERY IN THE STATE FOR MAKING STANDARD FLOWER POTS.

PRICE LIST OF POTS.

	Per 100		Per 100
2 inch	$ 3.25	6 inch	$ 2.20
2½ "	3.50	7 "	3.50
2¾ "	4.00	8 "	5.00
3 "	5.00	9 "	7.50
3½ "	7.25	10 "	10.00
4 "	9.00	11 "	15.00
5 "	13.80	12 "	20.00

Terms: Cash, free on board cars here. Address

HILFINGER BROS., Potters,
FORT EDWARD, N. Y.

Easter Decorations
will be enhanced vastly by using
GREEN SILKALENE for stringing.
Send for Samples and prices.
JOHN C. MEYER & CO.,
289 Devonshire St., BOSTON, MASS.

FLORAL DESIGNS
The Cut Flower Worker's friend. Fine book of 160 pages. Send $3.50 for it, to
J. HORACE McFARLAND, Harrisburg, Pa.

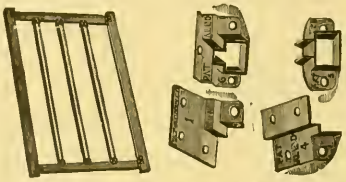
"Standard" Flower Pots.
As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address
The Whilldin Pottery Company,
BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I

STANDARD FLOWER POTS.
Every u er of Flower Pots shou'd correspond with us b fore purchasing elsewhere, our facilities are unequalled.
A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.
We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.
SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY,
Manufacturing the
ELVERSON, SHERWOOD & BARKER
STANDARD FLOWER POTS.
Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bud Pots, etc.
ADDRESS PITTSBURGH CLAY MF'G CO., New Brighton, Pa.

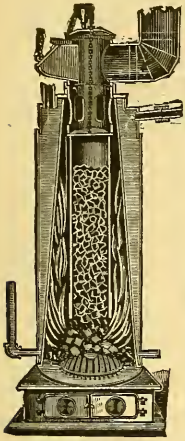
H. M. HOOKER COMPANY,
57 and 59 W. Randolph Street, CHICAGO,
NATURAL GAS MADE GLASS
FOR GREENHOUSES.
Write for latest prices.


GARDENERS HOT-BED SASH.
INDESTRUCTIBLE.
CYPRESS GREENHOUSE WOOD WORK OF ALL KINDS.
Write for prices.
THE PEIRCE & COLEMAN CO.,
Dayton, Ohio.
J. C. VAUGHAN, Agent for Chicago and New York.

U. S. AND FOREIGN PATENTS Trade Marks, Designs, Opinions, Searches, &c., promptly attended to. Send sketch or model for free examination as to patentability. All work strictly confidential.
GEO. H. CHANDLEE,
Atlantic Building, WASHINGTON D.
Mention American Florist

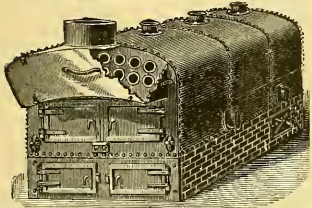
Please mention the American Florist every time you write any of the advertisers on this page.

W & C. CO. LIMITED
Wrought Iron
Pipe,
Fittings,
Valves,
ETC.
78 JOHN ST., NEW YORK.
WELLS & COUTAN CO., L'td.
Mention American Florist.



THE WILKS HEATER,
FOR HEATING
GREENHOUSES, STORES, DWELLINGS, ETC.
Manfactured by THE S. WILKS MF'G CO. 123 S. Clinton St., CHICAGO, ILL.
SEND FOR CATALOGUE.

KROESCHELL BROS.
IMPROVED
Greenhouse ×× Boiler,
41 to 55 Erie St., CHICAGO.



Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around (front, sides and back). Write for information.
Mention American Florist.

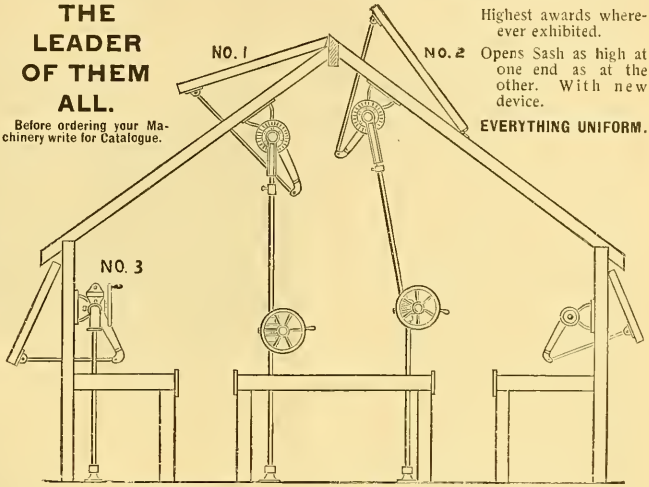
PLANT BED CLOTH.
CHEAP SUBSTITUTE FOR GLASS on Hot-beds, Cold Frames, etc. Three grades.
Light, Medium, Heavy.

Used by Florists, Gardeners, etc., invaluable for Tobacco Growers. Protects from frost. Promotes, hardy, vigorous growth and keeps beds warm; will not shrink or mildew. For sale by the leading Dry Goods houses, Seedsmen, Florists, etc. Well known and extensively used. For circulars and samples apply
NATIONAL WATERPROOF FIBRE CO,
50 South Street, - - NEW YORK.
Agents Wanted.
Mention American Florist.

GREENHOUSE HEATING
AND VENTILATING.
Superior Hot Water Boilers.
JOHN A. SCOLLAY,
74 & 76 Myrtle Ave., Brooklyn, N.Y.
Send for Catalogue.

YOU CAN SAVE MONEY BY PURCHASING, AND GLASS BY USING
HAMILTON'S PATENT SASH LIFTER.
"It works like a charm." So say those who use it. Send us 50 cents for one sample and you will say so too.
BAY STATE HARDWARE CO.,
272 Freeport Street, BOSTON, MASS.

STANDARD VENTILATING MACHINERY,
THE LEADER OF THEM ALL.
Before ordering your Machinery write for Catalogue.



Highest awards wherever exhibited.
Opens Sash as high at one end as at the other. With new device.
EVERYTHING UNIFORM.
E. HIPPARD, YOUNGSTOWN, OHIO.

THE "LOCKLAND"
Sash Bars ✳ ✳ ✳
ARE ALWAYS SATISFACTORY.
This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.
GUTTER MATERIAL, RIDGES, SASH, ETC.
The finest CLEAR CYPRESS used.
Write for circulars and estimates. . . .
LOCKLAND LUMBER CO.
. . . . . Lockland, O.
Mention American Florist.

RIDER

Do You Want
A RELIABLE
SUPPLY OF
WATER
For Your
GREEN HOUSE,
ROSE HOUSE,
NURSERY,
Conservatory, Lawn, House, Garden, Stock or any other purpose,
WITHOUT EXPENSE OF TIME OR LABOR?
All of this can be accomplished by using the Improved
RIDER OR ERICSSON HOT-AIR PUMPING ENGINE
Catalogue with full particulars, sent on application.
DE LAMATER IRON WORKS, 21 CORTLANDT ST., NEW YORK, N.Y.

ERICSSON

FIRST-CLASS CERTIFICATE OF MERIT.
PERFECT DRAINAGE BENCH TILE
Used by all the leading Growers and Horticultural Builders.
For testimonials, circulars, etc., address W. P. WIGHT,
UPLAND GREENHOUSES, : : : MADISON, NEW JERSEY

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.
JOHN G. ESLER, Sec'y F. H. A., Saddle River, N. J.

Index to Advertisers.

Abel C C & Co.....830
Adv Rates, etc.....832
Anchorage Rose Co ..829
Asmus Ernst.....821
Baird Chas A.....828
Baller F A.....821
Barnard W W & Co...824
Bay State Hdw Co....835
Bayersdorfer H & Co..832
Baylis Henry W.....824
Berger H H & Co.....825
Bird F W & Son 833
Bock Wm A 832
Bonsall Jos E & Son..833
Boston Letter Co. ...834
Brackenridge & Co....836
Brague L B.....822
Brauer & Richter 828
Brinton W P. 836
Brown R S & Son 829
Burns & Raynor.....823
Burrow J G.....831
Burton John..... 821 835
Carman R W.....833
Carmody J D.....835
Chandlee Geo F.....834
Chitty H E.....827
Cliffe David.....829
Connelly John J 825
Corbrey T J & Co..825 825
De Cock Jules 822
De Lamater Iron Wks.835
Demming Joseph.....829
De Witt Thomas.. 827
Dillon J L.....832
Dreer H A.....824
Eisele C & Co.....830
Elgin Rose Co 829
Elliott J Wilkinson....826
Elliott W H.....822
Ellison Wm.....822
Ellwanger & Barry....832
Euclid Ave Greenho's.831
Evans Charles F & Bro821
Faust H G & Co.....824
Felheim Lyman.....833
Ferry D M & Co.....824
Field S B.....828
Frost James 828
Gardiner J & Co.. ...832
Gibson J C.....826
Gonzalez & Co.....830
Hall Ass'n.....835
Hancock Geo 827
Hansen Christ 831
Hart James 823
Hart Michael A 823
Hartford H E.....822
Helml Jos.....824
Henderson John Co ..821
Hennecke C Co 833
Herr Albert M.....827
Hess Henry.....834
Hews A H & Co.....834
Hilfinger Bros.....834
Hill E G & Co.....826
Hippard E 821 835
Hitchings & Co.....836
Hoffmeyer C K 830
Hooker H M Co.....834
Horan Edw C.....823
Horan James..... 827
Horsford F H.....828
Hostetter E P.....826
Huebner H.....827
Hulsebosch Bros.....825
Hunt F H.....826
Hunt M A.....823
Hunter & Purdy.....823
Irvine John Co.....831
Jordan Floral Co 829
Kaufmann Ernst & Co.822
Kennicott Bros.....823
Koffman E.....822
Krick W C.....830
Kroeschell Bros.....835
Kuehn C A.....822
Kuyk Bros.....824
Larkin Isaac.....827
La Roche & Stahl.....823
Little W S & Co.....824
Livingston's Sons A W.824
Lockland Lumber Co...835
Lombard R T.....827
Long Dan'l B.....822
McBride Alex.....820
McCarthy N F & Co...823
McFarland J H.....834
McFarland J H Co.....835
McGowan John.....827
Manz J & Co.....835
Marschuetz & Co.....822
May John N 830
Meehan F J & Son 824
Mendenhall R J.....831
Meyer John C & Co 834
Michel Plant & Bulb Co835
Milling Bros.....825
Moffatt G J.....825
Moninger Jno C.....836
Moon Samuel C.....832
Moore Frank L.....829
Mullen Geo.....822
Nanz C G 825
Nanz & Nenner.....830 821
National Fibre Co ... 835
Nielson Hans 832
Niles Centre Floral Co.835
Olson M 825
Ouwerkerk P.....832
Peck & Sutherland.....823
Pelrce & Coleman Co. 834
Pennock C J.....827
Pennock Sam'l S.....823
Pierson F R Co.829 829 831
Pittsburg Clay Mfg Co.834
Powell W S & Co.....825
Randall A L.....823
Raoux C.....832
Reed & Keller.....833
Renard Joseph.....827
Rimbaud Benj.....825
Roberts D H.....830
Roehrs Theo.....825
Rogers Nurseries.....832
Rolker A & Sons 835
Rupp H S & Sons 828
Russell S J 829
Salter Bros.....830
Sander & Co.....826
Saul John.....826
Sayles Geo N.....831
Schnelder C F.....830
Schulz Jacob.....830
Scollay John A.....835
Scott Wm 831
Semple James 832
Shelmire W R.....827
Sheridan W F 823
Sherwood Hall Nur Co 831
Siebrecht & Wadley....826
Siplle Dopfel & Co....834
Situations, wants.....818
Smith C A Floral Co..822
Smith Henry 832
Spaulding T H.....830
Stark Bros 830 832
Starr Chas T.....827
Storrs & Harrison Co..820
Stott Garden Imp Co ..833
Strick J N & Bro 833
Styer J J 827
Sunderbruch H L.....822
Swayne Edw.....827
Swayne Wm.....827
Tricker Wm.....831
Ulbricht F J.....824
Vaughan J C.....829 831
Vicks Sons James.....828
Vreeland A J.....826
Watson B M 829
Weathereds Sons T W.836
Weeber & Don.....825
Welch Bros.....823
Wells & Coutan 834
Whitldin Pot Co.....834
Wight W F.....835
Wilks S Mfg Co.....835
Wisconsin Flower Ex..830
Wood Bros.....827

YOU CAN save money by printing your spring trade list in our columns.

CYPRESS GREEN HOUSE MATERIAL

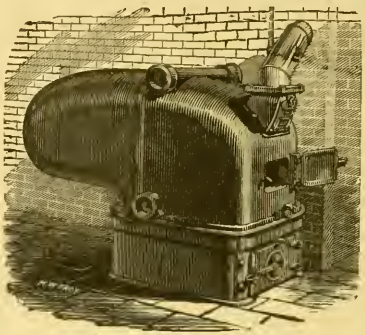
CLEAR CYPRESS SASH BARS

HOT BED AND VENTILATING SASH

JOHN C. MONINGER, 297 Hawthorne Ave., CHICAGO, ILL.

GREENHOUSE HEATING AND VENTILATING

Horticultural Architecture and Building.



HITCHINGS & CO.

Established 1844.

233 Mercer St., New York.

FIVE PATTERNS OF BOILERS.

NINTEEN SIZES.

Perfect Sash Raising Apparatus.

Rosehouses, Greenhouses, Etc., of Iron Frame Construction, Erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frame Benches with the "Perfect Drainage Bench Tile" or Slate Top.

SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUE.

WEATHERED'S DOUBLE DOME BOILERS

Are the Very Best.

OUR

Patent Rocking

AND

Shaking

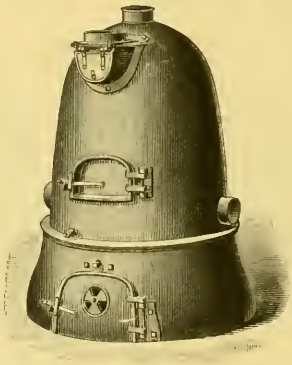
Grates

ARE

ABSOLUTELY PERFECT,

Being in the smallest sections are the least costly to keep in repair.

Send 3 Cents Postage for CATALOGUE and please mention this paper.



Proven by 40 years USE

Effective and Durable.

PATENT

Sash Raising Apparatus.

ROSE HOUSES, GREEN HOUSES, ETC.

of Iron Frame Construction, erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frame Benches with Drainage Bench, Tile or Slate.

THOMAS W. WEATHERED'S SONS, (Incorporated) 244 CANAL ST, N. Y.

EVERY BODY TELLS ME,

AND NOW I TELL YOU

THE "NEW DEPARTURE"

Is the BEST and the Cheapest

Ventilating Appliance

That has ever been Introduced for FLORISTS' USE.

This what Says about it.

MACOMB, ILL., Feb. 21, 1893.

MR. J. D. CARMODY, *Dear Sir:*

The ventilating apparatus received of you we finished putting up yesterday, and it works fine—I don't know how any one could ask more—as it raises the windows in a 100-foot house easily and evenly. If I had known a ventilating apparatus could be bought for so little money I would have ordered one for the house I built last year; and if I build another next year you can count on an order.

Very respectfully, I. L. PILLSBURY.

J. D. CARMODY, - - Evansville, Indiana.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

D. H. ROBERTS, 159 & 161 South 5th Ave., New York

NATURAL GAS MADE GLASS for Rose Houses, Conservatories, etc., etc. Our glass received the highest award at the Boston Convention of the S. A. F.

THE AMERICAN FLORIST

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, MARCH 23, 1893.** **No. 251**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company.
Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,

322 Dearborn Street, CHICAGO.
Eastern Office: 67 Bromfield St., Boston.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis, Mo., August 9 to 12, 1893.

CONTENTS.

Spring show Penna. Hort. Society 837
Carnations—Seasonable hints 838
—A group of carnation blooms 838
—Carnation notes 838
World's Fair notes 839
Main entrance Hort. Bldg., World's Fair (illus). 839
Sales by sample 839
Roses—Rose growing in the south 840
—Number of blooms cut 840
New York 840
Cyclamens at the World's Fair (illus) 841
Philadelphia 841
Washington 842
Mound under dome of Hort. Building (illus) . . 843
Boston 843
Buffalo 844
Tuberous-rooted begonias (with illus) 844
Chicago 848
Corrections 850
The seed trade 852
Carnation errata 852
Catalogues received 852
Still singing the same old song 854
St. Louis 856
Cincinnati 858
Toronto 860
Recent legal decisions 862

As EASTER draws near there will be worry and work both to get the Easter plants in perfection at the nick of time, but it is impossible to have every thing just right without care and watchfulness. If lilies are fairly well out one week ahead of time they can be removed to a cool light shed and will keep perfectly well. If azaleas are a little too forward put them under a bench in a cool house and cover with tissue paper to keep drip and dirt from the flowers. Hyacinths will keep in this way for ten days. Tulips are really better if placed in a cool shady place for several days before cutting; they then last much better and do not wilt when cut. Lily of the valley I always have cut and placed in jars of water several days before they are used. The absorption of water gives them greater size and stiffness. All growers have noticed how much better roses are for being kept twenty-four hours in water in a cool cellar. A cool damp cellar is much better for roses than a dry ice box. W. S.

NEXT WEEK comes the Rose Number.

Spring Show of the Penna. Horticultural Society, Philadelphia.

This show, which has just closed, was in some respects the best that has ever been held by this time-honored society. An entirely new departure for the spring exhibition was adhered to on this occasion. The plants, instead of being placed on the long and narrow and monotonous tables, were arranged in artistic groups on the floor of the main hall. The effect on entering was very pleasing.

In the foyer were the cut flowers, roses, carnations, violets and so forth. Pitcher & Manda had some new plants in this room, among which were the variegated form of Adiantum cuneatum, also the variegated leaved potato, and Maranta Lageriana and a new gynura.

Mr. John Burton's new rose American Belle was an attractive feature all through the show. What made it so much more of an attraction was Mr. Burton re-arranging his exhibit every day, throwing out those flowers which were damaged and replacing them by fresh cut blooms. If all the exhibitors in the cut flower department had followed this good example it would not have presented so deplorable a condition as it did on the second day after opening. And carnations were the worst, all of them being useless on Wednesday morning. Exhibitors and growers and all those who are interested in the carnation are very much disappointed. The escaped unconsumed illuminating gas is responsible for the trouble, so it is believed by many of those most deeply interested. An effort will be made to introduce the electric light for the chrysanthemum and regular fall shows. From my own observations I am inclined to think that even the electric light will not entirely do away with the difficulty. It is worth while to make an effort to remedy the evil anyway. And in the meantime it would be a good idea for the society to offer a premium for the best contrivance in which to exhibit carnations that would cause them to retain their freshness over the longest period. Or what would be better still, maybe, would be to adopt the Boston idea, that of the judges examining the exhibits each day and rendering their final decision on the last day of the show. By this means the cut flower exhibit would present a cheerful appearance at all times instead of the way it is now; a disgrace to the Pennsylvania Horticultural Society and to Philadelphia.

Madame Testout made a good impression by its beautiful color, large size and stout and long stems. They were exhibited by Mr. Ernst Asmus. Mr. May was awarded a silver medal for his new rose Mrs. Whitney. It is very much the same shape as what we may now call the *old* W. F. Bennett. It is, however, a delicate pink in color, and it is graceful in form and deliciously fragrant. Bridesmaid was also shown, but whether by Mr. May or Mr. Moore, the originator, I do not know. Certain it is that it retains its old friends and is making new ones all the time. There was only one exhibitor (in the grower's class) of American Beauty. Beauties must be *off crop*, for eight or ten growers exhibited this old favorite at the chrysanthemum show last November. There were some excellent Brunners, Laings and Rothschilds among the *hybrids*, as this class of rose is usually called in the trade. La France was hardly up to the standard of former years unless Testout overshadowed it and made the older rose seem more inferior in comparison with the new candidate for public favor. Brides, Mermets, Mme. Hoste, Sunsets, Bennetts and all the popular kinds were there in good form.

The orchids as usual attracted more attention than all the rest of the flowering plants put together, and with few exceptions the flowers retained their freshness to the end of the show, attesting anew the adaptibility of orchids for exhibition purposes. The time will come when we will have orchid shows—even in Philadelphia, for the taste for these blue blooded aristocrats of the floral kingdom is rapidly increasing.

Unfortunately there was only one competitor for the Craig cup for the best new carnation not yet disseminated. This was Mr. Swayne's Ophelia.

There is a much needed reform necessary in the offering of valuable prizes for new carnations. The variety which has won a prize should certainly be renewed every day so that the public can get an idea of the probable value of such a variety. The Boston plan of judging should be insisted upon in the case of all new varieties whether it be carried into effect with all cut flowers or not. Besides, I think the winner of the cup should, as a matter of personal pride in his variety, renew his exhibit every day.

There were no competitors for the Wentworth prizes until Fred Dorner's came in on Thursday, and the most of these were not eligible because they are disseminated. I did not see the flowers until the day after the awards were made, so could not judge of their respective merits. The white variety "Uncle John" and the red "The Stuart" were eligible, and the latter was awarded the coveted prize (a silver medal), but the former was not. However, the judges I know must have had good and sufficient reasons for withholding it, and it is certainly better to err on the side of not granting a prize for a new variety than it is to award it to one hastily and which would eventually prove to be undeserved. It is a pity that those of Mr. Dorner's which were eligible for competition in the new variety classes were not received in time to compete on Tuesday, for they certainly show great merit, and should be heard of in the

cut flower market in the near future.

Among plants Mr. Joyce had some fine specimens both in orchids in bloom, and palms and other plants which are grown for their foliage. Mr. Long, gardener to A. J. Drexel, Esq., had as usual exceedingly well grown plants. His collections of ferns were marvels of good growth, and show unmistakably what may be accomplished by painstaking and well directed effort. Among Mr. Long's specimens was a Coccoloba pubescens, a very rare plant, though it was found in the West Indies as long ago as 1690.

Two new names appear among the successful exhibitors in the persons of P. G. Cox, gardener to Mr. W. H. Kemble, who had some azaleas and standard zonal pelargoniums, and C. W. Cox, gardener to H. Clay Kemble, Esq., who had some well grown plants of ten week stocks, the variety being Princess Louise, or "Cut and come again."

W. K. Harris added to the color department by furnishing hundreds of tulips in full bloom. He was also successful in the various hydrangea classes. H. G. Standen also contributed to the success of the show, so also did Albert Woltemate, Chester Davis, gardener to Wm. P. Henszey, Esq. Something out of the common line at this season of the year was some snap-dragons in full bloom. Mr. Davis' cyclamen were also excellently well grown. George Huster, gardener at Girard College, also came in for some first premiums. Fred R. Sykes, gardener to Mrs. George Dawson Coleman, had some cucumbers which attracted attention.

There was only one dinner table design against four last November. Messrs. Kift & Son, however, displayed their usual originality, taste and skill in their production, and deservedly were awarded first money. Mr. George Craig took first for basket of flowers, also for plateau. Pennock Bros. were first for corsage bouquets and bridesmaids' bouquets, and John Crawford was first for brides' bouquets.

First for jardiniere of spring bulbs was captured by Kift & Son, who also won the first for decoration of growing plants, not over 100 feet square. This showed best effect in arrangement. A. Woltemate was awarded second; he had the choicest plants.

Portia seems to be still the best scarlet carnation which comes to the Philadelphia market, for it won first in both growers' and dealers' classes for best scarlet.

Jacob Becker had some well grown azalea plants, so also had W. K. Harris, but flowering plants were not out in sufficient quantity to make the hall as lively to look upon as we have seen it.

The only hyacinths in the show were those Messrs. Kift had in the jardinieres. Of rhododendrons there were none. Messrs. Kift and C. A. Knapp furnished most of the Harrisii lilies. Mushrooms came from the Lansdale Mushroom Company and C. A. Knapp.

Robert Craig had some grand specimen bay trees, araucarias, azaleas and tulips. J. M. Hughes, gardener for G. W. Childs, Esq., had a fine group of decorative plants. H. A. Dreer and H. F. Michell had fine displays of seeds, bulbs and garden implements.

Among the carnation exhibitors were Albert M. Herr, W. R. Shelmire, J. J. Styer, H. A. Dreer, C. E. Meehan, Edwin Lonsdale, Joseph Heacock, J. L. Dillon and John Welch Young. L.

Seasonable Hints.

Carnations bloom more freely as the season advances. The increasing light of the lengthening days gives additional vigor and productiveness. This however, produces an evil, little or not at all felt during the winter months. The sun shines through the unprotected glass with increased vigor, and shading must be resorted to to modify his fierce rays. The ideal shading would be some arrangement that could be removed morning and evening, or on cloudy days, and applied only when the sun shines the strongest. But the matter of expense seems to stand in the way until some ingenious inventor solves the problem. Carnations, and other greenhouse stock as well, need all the diffused daylight that can be had; but the full strong sun is certainly detrimental. The shortness of the winter day and lowness of the sun reduces this evil to a minimum. As the season advances it is greatly increased until it becomes impossible to grow any plant satisfactorily under glass without a proper degree of shading.

During the middle or latter part of March it will be found desirable to apply a light shading to the south slope of the houses. This should be increased as the days grow warmer until towards June the glass may be nearly covered both north and south sides. For ourselves we use whitewash applied with a brush; at first running a stripe down the center of each flight of glass, broadening this stripe as the season advances. Many put the whitewash on with a syringe, first running it through a phosphate sack as a strainer. Others use a mixture of naphtha and white lead. It is immaterial what is selected for the purpose; but judgement must be used with it. Do not put on too much at first—just sufficient to keep down the temperature on very bright days. When washed off by rain it must be re-applied. Houses running north and south will not require so much shading as those running east and west. Propagating houses and those we wish to keep cool will need more and need it earlier in the season.

It is almost useless to expect carnations to flower under glass during the late spring and summer months without a proper amount of shading. The labor of attending to them is also greatly reduced. Without shade they dry out directly and take almost an unlimited amount of water, and the plants are injured by the intense heat and glare of the sun. Incidentally we would remark that the carnations will stand and should receive more water now and during warm weather than in the winter season.

Avondale, Pa. W. R. SHELMIRE.

A Group of Carnation Blooms.

A batch of carnation blooms was recently received from H. E. Chitty, Paterson, N. J. It comprised five seedlings, as well as a selection of older varieties, the seedlings being numbered, but not named. Number 1 was a brilliant red, a few shades deeper than a true scarlet, but very bright; it has excellent stems, and seems tolerably free from the tendency to burst. It had a strong clove scent, and travelled in good condition. This seemed to us the most promising seedling in the batch. Number 2 was a white, of very strong growth. It had heavy stems and a well-shaped flower, but the blooms did not seem to travel very well. Number 3 was a pink of La Purite type; good stems and good flower, but color hardly bright enough. Number 4 was a crimson of stout, apparently dwarf growth; color a little too dark. Number 5 was a cream white, growth something like Dorner's Blanche, but this did not travel well. All these seedling blooms were from pot plants.

Among the older varieties received was Grace Wilder, some of the finest blooms of this sort we have ever seen. If it could always be produced in such condition as these flowers Mr. Chitty sent us it would never be superseded by newer rivals. Two yellows were represented, Andalusia and Golden Triumph. The first named is entirely clear yellow, without any red markings, but it did not travel as well as Golden Triumph.

A bunch of scarlet carnations was sent among the rest, with the statement that it was a mixture of Robt. Craig and Emily Pierson, and the request that some expert would sort them out and determine the two varieties. This we were totally unable to do; so far as we could tell the blooms were all of one variety, being precisely similar in color, texture, and growth.

Other varieties represented were Mrs. Mangold, Dawn, Grace Darling, Motor and Mrs. Pennock; they were all excellent flowers, and travelled remarkably well, excepting Dawn, which seems a poor keeper. Mrs. Pennock, Wilder, Motor and Grace Darling were particularly fresh.

Carnation Notes.

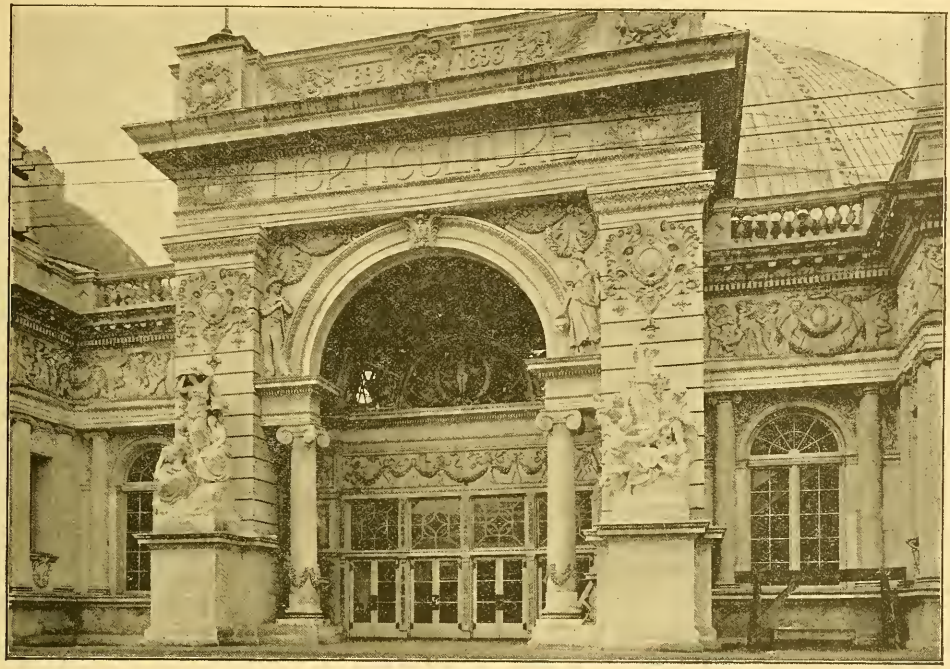
Mr. Shelmire's plan of growing tomatoes among carnations may be all right for the wholesale grower, but the retail grower needs not to grow vegetables among his flowering plants. As a general rule the retailer needs a continuous supply of carnation flowers as nearly all the year round as he can get them. A stolen crop for him would, itself, do a good deal of stealing.

The writer's practice has been to give the carnation benches a mulching of very rotten cow manure about the middle of March, about half inch thick; this helps to keep up the vigor of the plants for an early summer supply of flowers. Indeed, last year we did not pull up the old plants till August or near the time we had to prepare to put in the new crop of plants. Of course a good many plants of some kinds die out, but enough always remains to make it well worth the trouble of caring for them.

These few remarks are not made in a spirit of criticism, but simply in the interest of the general retail growers, who, of course, constitute the largest division of the great army of florists still marching on the way of progress.

There seems to be much difference of opinion among growers as to whether carnations should be syringed or not. For years I have never failed to syringe when there was sunshine and temperature, etc., to render it safe to do so and never yet saw any evil resulting from the practice. E. FRYER.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.



MAIN ENTRANCE OF THE HORTICULTURAL BUILDING, WORLD'S COLUMBIAN EXPOSITION.

World's Fair Notes.

One of Mr. Thorpe's latest plans is for a contest in floral arrangement during the month of August. Of course the difficulties in making the contest truly national in character will be numerous but he believes they can all be overcome. The month of August has been selected mainly because at that time so many florists will be sure to visit the fair and can take part without making a special trip for the purpose. Mr. Thorpe believes that many of the eastern florists will be sufficiently interested to have their material sent on from the east for the purpose, but all can enter and use material obtained in Chicago or within easy reach. These notes are writen at his suggestion and he hopes to see a full expression of opinion regarding the matter in these columns by those interested. Certainly such an important department of the trade as the arrangement of flowers should not be entirely omitted from a display intended to represent the progress of floriculture, and such contests always prove great attractions to the people. Mr. Thorpe believes that the rules to govern such a contest should be largely devised by those who will probably take part. Let every one interested be heard from now so that details may be settled as early as possible.

The display of cyclamens is still grand though now a trifle past its best. The cinerarias are now coming to the front and are making a blaze of color. Some very distinct advances in color and markings are to be seen, though one of the lots is so miserably poor that it seems almost incredible that any one would enter such a strain in such a contest. The contrast between this lot and the superb strains that surround it is truly painful. Quite a number of double varieties are shown and that these strains have become well "fixed" is evident from the very small proportion showing reverted flowers. The colors of the doubles show marked improvement over the washy shades first seen but still further improvement is needed before they can be called really beautiful flowers.

The display of annuals will certainly be immense. One of the greenhouses is filled with trays containing seedlings.

The pansies came through the winter in splendid shape in spite of the trying weather and though Mr. Thorpe guarded against failures by growing small lots under glass to fill in with, only a few of the latter will be needed. The pansy display promises to be a magnificent feature, and as they will be in bloom at the opening of the exposition they will start the series of displays that will be made in front of the Horticultural Building.

The roses also came through the hard winter in good condition in spite of many fears to the contrary.

Work is now progressing rapidly in all divisions of the department and as soon as the weather moderates sufficiently the remainder of the plants for exhibition will be received and placed in position.

The series of winter displays has drawn hosts of visitors to the grounds, and have proved quite a source of revenue to the Exposition. The calceolarias are coming on in good shape and will follow the cineraria display. This will fill in the program up to the opening of the Exposition in May.

Sales by Sample.

A sale by sample is a sale in which a sample is so used between the buyer and seller as to express or become a part of the contract of sale. The mere exhibition of a sample during the negotiation of a sale will not of itself make it a sale by sample. There must be a mutual understanding between the parties that they are dealing with reference to the sample. Where, however, a sale is made by means of the exposure and examination of a sample the implication will be raised that it is a sale by sample, otherwise the use of the sample would be meaningless.

The principal rule of law governing sale by sample is that the seller undertakes that the bulk of whatever is so sold shall correspond in kind and quality with the sample. In California, Idaho, Pennsylvania and the Dakotas, it is specifically declared by statute that "One who sells or agrees to sell goods by sample thereby warrants the bulk to be equal to the sample"—in quality, is probably meant, which is only what is implied in the other states.

In an early American case, which has been many times approved by the courts of the different states, it was claimed by the seller, who had shown a sample that no action upon a warranty could be maintained against him, unless the warranty was express; and that no other action could be maintained unless there was a false affirmation respecting the quality of the article. But, said the court, for what purpose is the sample exhibited, unless it is intended as a representative of the thing to be sold? What would an

honorable merchant say, if, when he took from a mass of sugar or coffee a small parcel, and offered to sell by it, the man who was dealing with him should ask him if it was a fair sample, and call upon him to warrant it so? Mercantile honor would instantly take the alarm; and if such questions should become necessary, there would be no need of that honor, which happily is now general, and almost universally relied upon. That there is not an unknown and invisible defect, owing to natural causes, or to previous management by some former dealer, he may not be presumed to affirm when he shows the sample; and, as to these particulars, an express warranty may be required, consistently with confidence in the fair dealing of the vendor. But that the thing is the same, generically and specifically, as that which he shows for it, he certainly undertakes, and, if a different thing is delivered, he does not perform his contract, and must pay the difference, or receive the thing back and rescind the bargain, if it is offered him.

That the seller does not know that the bulk of the goods are inferior to the sample will not as a general thing relieve him from his implied warranty in selling by the sample. If the buyer purchases upon the faith of it, it is enough. But if the buyer knows, or from the circumstances ought to know, that the seller has no knowledge of the bulk beyond what is afforded by the sample, the buyer will be presumed to purchase at his own risk.

There is no implied warranty against latent defects in goods sold by sample which are present both in the sample and the goods delivered. But a stricter rule is applied to sellers who are manufacturers. If goods are sold under a specified commercial description, though they be sold by sample, there are authorities holding that the goods shall reasonably answer the specified description in its commercial sense; and that the sample in such cases is to be looked upon as a mere expression of the quality of the article, not of its essential character, so that if, notwithstanding the bulk agrees with the sample, yet if from adulteration or other causes, not appearing by the sample though not known to the seller, the bulk does not reasonably answer the description in a commercial sense, the seller is liable.

Where what are called "average samples" are taken, that is, the seller takes samples from different parts or packages of the same bulk, and then mixes up these samples, so that he may get a sample that will correspond to the average quality of the bulk, and the buyer then knowing it purchases by such average sample, there is no breach of the implied warranty of correspondence if some parts or packages of the bulk are inferior to the sample.

There is no warranty in the sale of goods by sample that the goods shall be fit for a particular purpose.

If an opportunity is given to the buyer to inspect the goods he is purchasing and he inspects them or on his own responsibility waives inspection, the implied warranty of correspondence to sample will not be raised. In such case he will be considered to have proceeded at his own risk. Benefits of the implied warranty are intended for those who have no such opportunity of inspection.

An agent can sell by sample and bind his principal either when he has been given special authority to sell in such manner or when he has been given general authority to sell the other's goods.

Where the terms of a sale are intended to be embodied in a written contract and nothing is said therein about the sale being by sample, verbal evidence will not be admitted to show that it is a sale by sample.

Rose Growing in the South.

We would like to find out the cause of our roses mildewing so badly. Our rose house is a three-quarter span, 20 feet wide, facing the southwest, with ventilators at the top and on the side of the house. We give plenty of air all day, having all the ventilators open, and are getting plenty of sun all day, and do not need to fire any at night, and although we use lots of sulphur yet our roses seem to mildew all the time. They are making good strong wood, but as soon as they form new leaves the mildew gets on them. The roses were planted very late, but are forming lots of buds now, and would do well if it was not for mildew. We use raised benches. Any information on the subject will be thankfully received. TEXAS.

Your correspondent complains of being badly afflicted with mildew in their rose houses. As I understand the matter they have ventilators in front on the houses and on the ridge, plenty of sun, and they give plenty of water during the day and do not need fire at night. Herein lies the trouble of their mildew, I am afraid. There are two things though, which, in my estimation are very plain. In the first place although their house does not appear to need any fire heat during the night, notwithstanding they have a temperature of 50° to 60° at night the atmosphere in the house gets somewhat chilly toward morning, and there is certainly stagnated moisture more or less. To clear the mildew out of the houses I would advise them to use a very little fire at night and give a little air from ventilators and use sulphur as they have been doing, and I think by that means they can get rid of it. Furthermore they they should be a little careful about the front ventilators and not apply in any quantity except during the middle of the day when the sun is very hot. After a stagnated atmosphere in the house the leaves become somewhat moistened and soft which makes them liable to attacks of fungoid troubles; hence, if they wish to check it entirely I think it would pay them to put on a small amount of fire in the house at night, ventilating from the ridge at the same time, but keeping front ventilators closed. JOHN N. MAY.

Number of Blooms Cut.

In one house 18x100 we have 700 plants of roses, Perle, Hoste, Gontier and Niphetos, from which we have cut 1,150 dozen buds from September 1 to March 1. As we are new in the business would like to know how well we have done compared with other growers.

Pekin, Ill. GEO. A. KUHL.

New York.

Monday, 13th inst., was the first warm spring-like day. The air was soft and balmy, the Greeks got out on the street at last, customers flocked into the retail stores and trade in general took a sudden jump.

The wholesalers had no difficulty in cleaning out the two days cut which had been received. Carnations and violets were the first to feel the change, and roses soon followed. Harrisii lilies alone seemed forsaken and buyers could not be found at any price.

The good start thus made has been felt throughout the week and in all directions hopefulness prevails. Roses are coming in in increased quantity and greatly improved quality. The Jacqs, Beauties and Brides especially at Young Bros. are splendid, and Millang Bros. are justly proud of their Meteors, while the stock from John Taylor at Burns & Raynor's would be hard to beat.

The new Hotel Waldorf was opened during the past week with much fuss and display. There was considerable floral decoration of the interior, but as snobbery and pomposity took the place of courtesy at the entrances to the hotel on these occasions a description of the decorations at this very exclusive resort is not practicable.

The first monthly exhibition at the rooms of the New York Florists' Club was a great and unmistakable success. From the hour of opening until the close the place was packed with people, largely ladies, from the best society. There were times, indeed, when it was impossible to make room for the crowd awaiting admission and the oft repeated call of the sable attendant "Everybody keep moving please," seemed to have but little effect on the admiring throng.

The plants were grouped and massed all round the sides of the large room, the smaller room being devoted to the cut blooms. Among plants there were azaleas, hyacinths, cinerarias, genistas, cricas, lilacs, orchids and other bright blooming favorites, with a fine representation of palms, araucarias, anthuriums and other decorative foliaged plants. One of the most unique things exhibited was a log all overgrown with Cattleya citrina in bloom, which hung in the folding door. It was contributed by Pitcher & Manda.

But the main attraction seemed to be the exhibit of cut roses, carnations, etc. in the smaller room. Here the crowd tarried longest and was most difficult to keep in motion. The display was well worthy the attention it received, coming as it did from the choicest productions of New York's most famous commercial growers. The greatest attraction of all seemed to be the Mme. Testout rose which was shown in grand condition. The following list of awards of certificates and honorable mention will give a good idea of who the exhibitors were, as the whole display was so uniformly excellent that there was scarcely an exhibitor who did not receive some award.

In plants certificates of merit were awarded to Siebrecht & Wadley for group of orchids and palms. To Pitcher & Manda for group of anthuriums, orchids and bromeliads; Maranta Lageriana, Adiantum cuneatum variegatum, Asparagus Pitcherianum, Cypripedium Greyanum unicolor, Cattleya citrina, Odontoglossum Rossi majus. To Geo. Bennett for Cineraria hybrida. To James Dean for Erica persoluta alba and hyacinths. To J. M. Keller & Sons for azaleas and genista. To I. Forsterman for Genista

PARTIAL VIEW OF THE DISPLAY OF CYCLAMENS AT THE WORLD'S COLUMBIAN EXPOSITION.

racemosa superba. To G. Bergmann for Begonia Vernon. To Ernst Asmus for lilacs. To Chas. Zeller's Sons for tulips and hyacinths. To C. H. Allen for Cyclamen persicum giganteum. To Peter McDonald for group of orchids and Anthurium Scherzerianum. To Thomas Griffin for mushrooms and tomatoes. To Louis Schmutz for Cineraria hybrida.

In cut flowers certificates of merit went to Ernst Asmus for roses Mme. C. Testout, Jacqueminot, Magna Charta, Meteor, Bride, Mermet, Hoste, Cusin, Watteville, and H. Schultheis; for carnations Lizzie McGowan and Salmon Queen. To John H. Taylor for roses Mermet, Bride and Gontier. To F. L. Moore for rose Bridesmaid. To W. H. Young for rose American Beauty. To John McGowan for carnations New Jersey and Fred Cody. To C. H. Allen for carnations Lizzie McGowan and L. L. Lamborn. To C. Peschecker & Son for carnations Grace Wilder and Golden Gate. To Dailledouze Bros. for carnations Silver Spray, Robert Craig and American Flag. To H. A. Francis for mignonette Eloise Francis.

Honorable mention was given to Wm. Tricker for Primula obconica rosea. To I. Forsterman for group of orchids and stove plants. To Pitcher & Manda for Kentia Belmoreana and variegated potato. To Ernst Asmus for lily of the valley, hyacinths and scillas. To Chas. Zeller's Sons for tulips and narcissus. To E. Koffman for smilax. To A. H. Hews & Co., for pots, vases and jardinieres.

There were present quite a number of visitors from distant points, including J. C. Vaughan, Chicago; A. Gallup, Denver; L. E. Marquise, Syracuse; E. A. Seidewitz, Annapolis; and "Caldwell the Woodsman."

It will be a big undertaking to keep up the floral attractions at the Press Club Fair, and the Madison Square Garden Exhibition in the same week. The week selected for the exhibition is also unfortunate in being the time of the opening of the World's Fair in Chicago, and is besides, much too late for a display of spring flowering bulbs.

Mrs. Reid, mother of Mrs. H. A. Siebrecht, died at New Rochelle on the morning of March 16, after a short illness. The funeral took place at 2 p. m. on Sunday, the 19th.

Philadelphia.

The spring show of the Pennsylvania Horticultural Society is a thing of the past, and while they are to be congratulated on its artistic success and the pleasure it gave to the members and visitors, the secretary is far from satisfied with the receipts, and reports a deficiency. This is nearly always the case with the spring show, however, and is not so much of a disappointment. Had it not been for two very disagreeable days the result might have been different.

The banquet given by the Florists' Club to visitors and judges was held in the lower hall, Wednesday evening and was a very enjoyable affair. There was no elaborate attempt at decoration, a bank of plants arranged across the hall dividing the room, and a number of roses in vases and baskets of cut flowers occupied the centres of the tables.

While there were not so many guests the different parts of the country were well represented. There were Mr. Gallup of Denver, from the far west, Caldwell the woodsman of Alabama, from the South, Mr. Stewart of Boston from the east, Mr. Vaughan from Chicago, Messrs. Herr and Schroyer of Lancaster, Mr. Dillon of Bloomsburg, Mr. Fries of Bethlehem, Mr. Seidewitz of Baltimore and Mr. Shelmire and others from Chester County.

After the menu had been discussed and the cigars were passed around, Mr. Craig, who presided, called for order and in a few remarks started the ball rolling. He was glad to see so many present from a distance; the far west, the east, the south, and neighboring cities were represented as well as all branches of business—the rose grower, the carnationist, the wholesale and retail florist and the mushroom specialist. The suggestion to have a banquet in connection with the spring show was a happy one, and he hoped everybody would put aside all formality and have a good time. The past winter had been a very hard one on all branches of the business. Retailers and growers, decorators and shippers, had plants and flowers frozen, and business had been interfered with to a great extent on account of the severe weather, and it had been a very bad season for the bulb men. But in spite of all their troubles, many were here and he was glad to see them bob up so serenely.

Mr. Vaughan was first called on. He said he was not much of a speaker either before or after dinner. He was glad to see the different parts of the country so well represented. He urged upon all present to make it a point to be present at the meeting of the World's Horticultural Congress to be held on the 16th of August in Chicago during the World's Fair. There they would meet representative men from all parts of the world; men who were high up in the profession. It was fortunate that the time secured was so near the close of the annual meeting of the Society of American Florists, and therefore convenient to all who attended that meeting, and in many other ways it would be the best week to spend in Chicago.

Mr. Avery C. Gallup of Denver, Col., in speaking for the far west, said that

remembered with pleasure his first visit during the meeting of the S. A. F., in this city. He had been a resident of Denver for 21 years, had seen it grow from a town of 6,000 to a city of 150,000 people. They could not boast of much horticulturally at present, but the taste was growing. There was about $100,000 invested in the business in Denver and a business of about $150,000 done each year. The quality of flowers grown was not up to the eastern standard, but they did not have the market for the finer grades of flowers as yet, but hoped to equal the best before long. He said their Florist Club had had its first banquet this season, and invited all to come to the Rockies and they would be well treated.

Mr. Stewart brought the regrets of the Boston Florists' Club. He said he liked to come to Philadelphia as he always had a good time.

Mr. Craig here paid his respects to Mr. Farson. Mr. Farson said Mr. Craig had taken advantage of him in Chicago and had said things about him that the public press had refused to print. But being so hard worked at the present time, however, he begged the indulgence of the company, and would take care of Mr. Craig at some future time.

Mr. Schroyer of Lancaster said he lived about 70 miles from Philadelphia; that in his neighborhood they had the prettiest women and grew as fine carnations, if not a little finer than anywhere else, and if any of the boys would come up and see him he thought he could prove all he had said.

Mr. Seidewitz of Baltimore said he was glad to be with the boys in Philadelphia. A certain grower in his city made a habit of visiting Philadelphia whenever anything went wrong with his plants, to get advice. He had succeeded pretty well as to roses and Easter flowers but with rubbers the medicine he got didn't seem to be the right kind, but he was a persevering man and would get there all right at last. When the boulevard from Washington to Philadelphia was completed Baltimore would stand up and hold its hands right and left to Philadelphia and Washington. They had had a very successful chrysanthemum show there last year, clearing some $1200. He said that success came from everybody putting their shoulders to the wheel and all working together. He would like to see a spring show, but would have to wait a little while for it. He invited all who could to come to Baltimore and see their next exhibition and guaranteed they would have a good time.

Mr. John Westcott was called on to state what he knew about the hard work of the show. He said he did a little work and with the help of others who took an interest in the show they had made it what it is. But it could be a great deal better and there were a number of others who should turn in and help with their heads and hands; and if all pulled together they could get up a show that would astonish everybody. The spring exhibition was of just as much importance as the chrysanthemum show, as more wealthy people were in town to see it. To discontinue the spring shows because they did not pay would be a step in the wrong direction; it would be a step backward instead of forward. He hoped all would turn in the next chance they got and give the public a surprise.

After Mr. McCall had rendered a song Mr. Burton was called on for a speech and made a humorous address in his peculiar style.

Mr. Wallace of the Florists' Exchange sang "The Bonnie Lassies," and then Mr. Dillon of Bloomsburg spoke of the educational feature of such exhibitions; that this point should not be lost sight of, that while the show might not pay in dollars and cents it was a great benefit to the trade as it helped to cultivate a taste for the beautiful, it was one form of advertisement and he thought a profitable one. Every florist who had anything that would be of interest to an exhibition of this kind, should send it in and should try to have something if possible.

Mr. Gilbert Moore, whose horticultural knowledge was limited to growing Chinese lilies, was a very acceptable addition to the company. He divided honors with Mr. Lonsdale as a singer and it was with difficulty that the Duke marched his army up and down the hill; but he finally got them there in great shape.

The meeting finally adjourned at 2 a. m., with the singing of Auld Lang Syne.

If these very enjoyable occasions could only be started about 7 p. m., instead of 10:30 or 11 there would be a much larger attendance and the company could all remain to the close instead of having to leave before the fun commences.

Business moves along in the old fashion, there being no great glut of flowers. Carnations seem to be the most plentiful, but $1.50 is still asked for good ones, and there seems to be sale for most of them at that figure, some good Wilders even bringing $2. The hybrids in market at present are poor. Brunners are about all cut out for the time but Anderson and Heacock will each have a new lot in a few days. John Burton has been sending in a fine lot of Baroness and Scott & Son have been cutting some fine Merveille de Lyon.

There is a grand lot of Easter plants about. Hydrangeas, lilies, genistas, spireas, azaleas and other blooming plants, are going to be in fine form, and if the weather should be fine a big Easter trade is confidently looked for. K.

Washington.

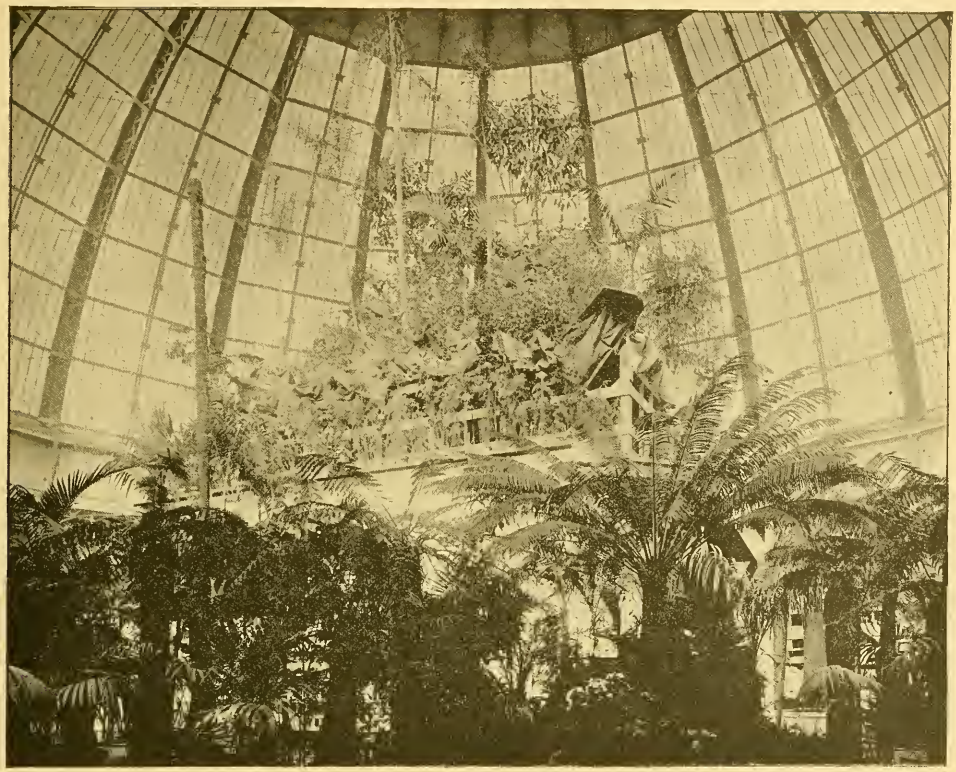
The inaugural ball was quite as important as the inaugural address, in fact I think the interest shown in its decorations was far greater than any part of the ceremony. The fact is fairly demonstrated that Washington can do as fine work in the art of decorating as any city in the union.

The eight beautiful white pillars twenty-six feet in circumference crowned with ornate capitals, which in two rows of four each divide the inner court into three sections, were triumphs of decoration. A deep border of maroon bunting swathed the base of each pillar for a distance of eighteen feet, forming a basket or vase which was filled with palms, dracænas, ferns, pandanus and other ornamental plants. Above this were white draperies as an effective background for interlacing vines of wild or southern smilax. Above and behind the palms on each pillar, on shields of the union, were the names of the twenty-three presidents and vice-presidents, Mr. Stevenson's being used to complete the necessary twenty-four names. Behind each shield were draped four silk flags. On the opposite side of each pillar were wheels of electric light, in which the colors of the spectrum contended for mastery as they revolved. In the center of the floor the fountain rose some twelve feet in the air, from which height it showered down over a series of scallop-shaped trays supported by ornamental chains to the immense basin, where on the surface of the water floated water hyacinths and other aquatic plants. The inner walls of the basin were lined with cork filled with decorative and flowering plants. Eight large vases were placed at regular intervals around the coping, each containing fine specimens of pink and white azaleas, bordered with small plants of genista in bloom. Nestled among the plants were electric lights in the union colors.

On either side of the fountain about twenty feet to the north and south rose the triumphal arches, surmounted by the American eagle perched upon shields, from either side of which floated the stars and stripes over a tier of victors' wreaths of camellia leaves, tied with effective bows of tri-colored ribbons. The woodwork of the arches was covered with soft white bunting, presenting a marble-like appearance, which served as an excellent background for the draperies of Asparagus plumosus and wreaths. In the broad space just beneath the victors' wreaths and over the archway in electric lights were the names of Cleveland and Stevenson. The supports of the arches on either side blossomed into beauty with immense panels of roses and lilies against a background of greens over the white drapery. The platforms beneath the arches at a height of twenty-five feet above the floor were used for the accommodation of the Marine band, that on the north side of the building holding 130 musicians, who played for the promenade numbers, while on the opposite platform were the 60 members of the band who furnished the dance music. The platforms as well as the pillars supporting the same were covered with white twined with greens. A mass of palms at the corners of the platforms was accented by a pendent border of victors' wreaths tied with red, white and blue.

The inner wall of the arcade under the first balcony was festooned with crimson drapery. On the outer portion of the balustrade the corners of the arches were emblazoned with electric lights, forming the names of the men who from the time of Washington up to the present date have been elected to the office of chief magistrate of the United States. The arches were outlined with tiny electric lights; the curved spaces between the cornices were filled in with circular plats of laurel leaves studded with lights; a background to this arrangement of electric lights was formed by groupings of American flags interspersed with draperies of crimson velvet embroidered with a deep border of bullion. The centers of the draperies were caught with breast plates and helmets of steel and bronze. In the center of the stars and stripes were the shields of the states. At the eastern end of this building over the name Cleveland was the unique design in electric lights of an enormous Japanese fan unfurled. Miniature electric lights in every color outlined the sticks and the fantastic design on the body of the fan. Over this was an arrangement of immense palm leaves. The walls of the second balcony were hung with crimson drapery, while here and there were hung blue silk banners, on which in gold were the coats of arms of the states of the union.

The outer edge of the balcony was adorned with ornamental vases of terra cotta, in which sprays of electric lights were introduced with beautiful effect among the palms. The polished green columns supporting this balcony were twined with spirals of electric lights. The panels of the balustrade were ornamented in a similar manner to that of the



PROGRESS OF THE WORK ON THE MOUND UNDER THE DOME OF THE HORTICULTURAL BUILDING AT THE WORLD'S COLUMBIAN EXPOSITION.

first balcony, with union shields behind which flags were unfurled. The walls of the third gallery were hung with white and gold draperies, while on the panels of the balustrade were flags of all nations. Above this, beyond the frieze of arc lights in tiers of white and gold, the drapery of the peaked ceiling was made to conform to the architectural lines of the building, the undulating fullness producing an artistic effect. These elegant floral decorations throughout were done by Messrs. J. H. Small & Sons of this city.

Some idea of the quantity of plants and vines necessary for the great occasion of an inaugural ball can be obtained when it is understood that for the decoration of the eight pillars and the two large arches, the amount of southern smilax was 150 bales, or three car-loads, irrespective of the car-load of palmetto which was shipped the same day from the south. In addition to this was used 3500 decorative plants. There were 19,000 yards of drapery used in the decorations; 10,000 of this was used for the ceiling, 7,000 for the balconies and 1,000 yards for each of the arches.

The rooms in the southwest section of he first balcony, set apart for the presidential party, were decorated elaborately. The entrance from the balcony leading to the room in which President Cleveland was received, was lined on either side with a wall of laurel, with here and there bunches of Harrisii lilies. Within the room the walls were hung with white bunting culminating in sunburst effects in four arches, presenting the appearance of a veritable bower. From the floor to the center of the ceiling the draperies were covered with Asparagus plumosus. The fire-place and mantel rose out of a mass of bloom. The fire-place was banked with white azaleas and Adiantum cuneatum. The mantel was banked with adiantum. The entire mirror was framed with a mass of maiden-hair ferns, on which rested a large crescent composed of 365 cattleyas. Above this hung a wreath five feet in diameter of camellia leaves tied with wide heliotrope and white ribbons, gracefully undulating to the two nearest corners of the room. In each corner of the room was a frame-work six feet high, covered with laurel, on the top of which was a handsome vase filled with fine specimens of hybrid roses. In the center of the room stood a table ornamented with a large vase of Laings. This room attracted special attention.

The decorations throughout were light, airy and graceful. Great credit is due the decorators for this most excellent work.

C. LESLIE REYNOLDS.

Boston.

The cut flower trade has experienced a very general revival since the coming of bright spring weather and there is a very gratifying activity all around. Carnations and violets feel the impulse especially, for as soon as the fakirs can get on the street with these goods there is sure to be a greatly increased demand. The prospects for Easter trade are very encouraging, the only thing which can wreck the plans of either growers or dealers being a spell of bad weather at that time. It is not likely that there will be too many lilies this year. Lawrence Cotter has as fine a house of longiflorums as ever was seen. They are dwarf and stocky, all of even height and have an enormous crop of buds. The whole lot has been disposed of to Jordan, Marsh & Co. at a good price. This firm made its first venture in Easter lilies last year by importing a lot of Bermuda trash. One season's experiment with such rubbish generally suffices. Candidums have been on the downward track for the past few years and the demand is now very small. There are but few being grown in this vicinity and these are as a rule of inferior quality. It will not be a bad idea to let the French candidum bulb growers keep their stock for four or five years and give them a chance to come back to bulbs of decent quality. If candidum blooms

could be produced such as were common ten years ago they would still sell, but the miserable bulbs now sent over produce blooms which are little better than white azalea flowers.

The visit of the garden committee of the Mass. Horticultural Society and friends to the greenhouses of Mr. C. V. Whitten on March 17 was a most enjoyable occasion, and the fact that it was St. Patrick's Day gave an additional charm to the occasion for certain members of the party. Mr. Cotter, who superintends the establishment, met and escorted the visitors through the houses, and many were the expressions of admiration as they inspected that incomparable house of longiflorum lilies. There was also much interest manifested in two fine houses of Brunners, one just going out of crop and the other just coming in for Easter. The Mermets and Brides were found to be in grand shape also. After going the rounds of the greenhouses the visitors were escorted to Mr. Whitten's residence where that gentleman extended a cordial welcome and an invitation to partake of a nice lunch and to sample the contents of an overflowing punch bowl, which was accordingly done without further ceremony. Each member of the party was called upon for a short speech and an hour of pleasant social intercourse passed rapidly. There were present Secretary Manning, of the Mass. Horticultural Society, Chairman Barker, of the Garden Committee, Chairman Wood, of the Fruit Committee, Chairman Woodford, of the Committee of Arrangements, Treasurer Richardson, President Dawson, of the Gardeners' and Florists' Club, Supt. Cameron, of the Botanic Garden, M. H. Norton, P. Welch, Robt. Farquhar, W. J. Stewart and others.

Mr. J. G. Barker, superintendent of Forest Hills Cemetery, read a paper on tuberous rooted begonias at Horticultural Hall on March 18. The essay was very interesting. In the discussion which followed Mr. Ross, superintendent of Newton Cemetery, took up the cudgel in favor of fancy foliage beds and deprecated the growing disfavor with which his once popular mode of decorative planting is held.

Mr. J. H. Woodford has been appointed by the Massachusetts Commissioners for the World's Columbian Exposition to take charge of the collecting and forwarding of exhibits in the floricultural line, and although much time has been foolishly wasted and it is now very late to make a proper beginning, yet a determined effort is to be made to do something which will be creditable to the state.

An incident which might have had a very serious ending is furnishing material for considerable joking at the expense of one of our well known growers. Missing some roses and suspecting that some one was thieving at night he stationed a watchman in the greenhouse. He himself was the first visitor to appear and the watchman not recognizing him in the darkness promptly put a bullet through his hat. Experience is a great teacher.

Buffalo.

Last Tuesday was a red letter day in the history of the Buffalo Florists Club. In the evening the annual election of officers occurred with the following result: President, Daniel B. Long; Vice-President, W. A. Adams; Secretary, Edward I. Mepsted; Financial Secretary, Harry J. Millett; Treasurer, Charles H. Keitch. The members turned out in force, as they do only on such occasions.

After the election was over and a little necessary business disposed of, we all adjourned to the parlors of one of our leading hotels where we passed a few of the most enjoyable hours that the writer can ever remember. The menu and decorations of the tables left nothing to be desired, but after Pittsburg, all these affairs will, I am afraid, for a long time look tame and meagre.

In the feast of reason business, it would be hard to beat our little club and its friends. The writer would not lay particular stress on this part of the program if it were not really well deserved. Each and every speaker, young and old, acquitted himself nobly, in some cases surprising even themselves. The retiring president, John F. Cowell, in a few happy remarks installed W. Scott as toast master. A few of the responses deserve special mention: The toast, "Our Society," was well taken care of by Mr. Cowell in his happiest vein, and the quantity of botanical names and phrases that he managed to work into this simple subject was astounding. Wm. Scott spoke for the "Society of American Florists." It is very easy to say a few nice and true words about our grand national society. "Our New Officers" brought our treasurer, Mr. Keitch to his feet, and so well did he acquit himself that he kept us in a roar. "The Retailer" was taken care of by Mr. Anderson. Mr. A. is a young man, but many a thing he said about how to and how not to run a retail store, will be deeply pondered on by many an older member. Mr. Milley responded to "The grower," and said many good things. Mr. Giddings, of Corfu, was also called on as a grower, and not only that, but as a representative of that great little village of Corfu, which is gaining a national reputation as a carnation center. Mr. Giddings said some very broad-minded things about the advantage of a lot of growers being in one vicinity and after that he proved to be the humorist of the evening. He told a couple of stories which took immensely; the one about "The price of the *Caller* bloom" brought down the house and was greatly enhanced by pure Western New York farmer's dialect, which Mr. G. so easily acquires. "Our annual flower show" was left to Mr. Mepsted, and it was handled in his usual terse and sensible style. Mr. M. said that at even a sacrifice of our plants and money too, we could not afford to let our flower shows drop, as he felt sure much of the great improvement in our popular flowers, and the enormous increase in sales in the past few years was due to these displays all over the country. "Our guests" gave Mr. Walter Mott, of Philadelphia, an opportunity to be very complimentary to the B. F. C. There were loud calls for Mr. Peter Crowe, of Utica. Mr. Crowe, in a muscular, broad shouldered, "strike"-ing speech, returned thanks for all mercies received, and hoped no similar occasion would be marked by his absence. "The professional gardener" was assigned to Mr. V. Hammon, and who could speak to the subject more ably? short notice was given Mr. H. or he would have given us more of such a good thing. Mr. Hammon said that in a change of country we should always have many things to relearn in our business, and the man who was so well posted in France or Germany, or England would soon find that new methods must be adopted here, and of course *vice versa*. This exhausted the regular toast list, but by no means all the talent. Calls were made and responded to in good style by Mr. E. L. Cork, Mr. Mansfield, Mr. Wm. Legg and several others, and last, but by no means least, we got the old war horse Mr. Constantine on his feet, and before he sat down we had all made up our minds he was the orator of the occasion. I had almost forgotten an important toast, "The ladies." Of course the dude and ladies' man, Mr. W. A. Adams, had to respond, and did it well. Mr. A. said without the ladies there would be no florists, which is certainly very true. We all expected that Joseph H. Rebstock would have returned from his trip round the continent in time, but he did not turn up in town till the following day. His absence was somewhat atoned for by Mr. Mott singing in his fine tenor "When our Joe comes back again." The enjoyment of the evening was much enhanced by numerous musical selections rendered by the McCabe Brothers and Mr. Michael Bloy, on the zither, banjo and mandolin.

The guests from out of town were Peter Crowe, of Utica, Mr. Bonfield, of Little Falls, N. Y., F. Mansfield, of Lockport, E. Giddings, T. A. Webb and Mr. Edwards, of Corfu, N. Y., Mr. C. Sweet, of Rochester, and others, besides several prominent citizens.

Business, except funeral demands is very quiet, but we are all hoping and expecting big things for Easter, and Buffalo is well supplied with a fine lot of Easter stuff. May that hustling Saturday be blessed with genial weather, is the prayer of your humble servant.

W. S.

Tuberous-Rooted Begonias.

[Abstract of paper read before the Massachusetts Horticultural Society, March 18, 1893, by John G. Barker, Superintendent of Forest Hills Cemetery, Boston.]

My attention was called to this plant in 1873 by receiving a package of seed from Norfolk, Va. When the seedling plants were ready for planting out a bed was prepared and they were set June 10; they began to flower July 10, and continued in bloom until the end of the season. This bed rivalled any other bed in the ground, however choice the plants. The March number of the AMERICAN FLORIST, for 1886, contained an article which states that "Great improvements have been made in this flower in the past few years; at all the great exhibitions in Berlin, Paris and London these begonias have been well represented and attracted much attention. Having a compact habit, dark glossy foliage, handsome flowers, both in shape as well as richness and variety of color, they are desirable for either pot plants or in beds. Some of the single flowers measure five to six inches across. Some of the double blooms resemble well-formed roses or camellias." Since 1886, many articles have appeared always commending them, and favoring a more extensive use of them in the many ways for which they are adapted. In the AMERICAN FLORIST of February, 1891, appears an interior view of the tuberous begonia house of F. J. Meech, at Charlevoix, Michigan, with an enthusiastic letter upon these plants. In the October number in 1891, a fine ornamental bed in Pittsburg, Pa., is shown which was in profuse bloom with rich foliage, from June 20 to the end of the season. It was 80 feet, by 8 feet, and a magnificent success; the handsomest bed ever seen in that city. Only one end was shaded at all, and that end made the poorest show, proving that the brightest sunlight insures the best result from these plants. William Fal-

TUBEROUS-ROOTED BEGONIAS IN THE GARDEN.

coner, editor of *Gardening* writes of these plants as he saw them at T. Griffin's nursery, Westbury, L. I.: "The behavior of these plants in the open air beds was very encouraging. The main block of beds was right in the open field, unshaded by anything. The beds showed no gaps, and the plants were ten to twenty inches high, and very luxuriant, with fine bold foliage, and a mass throughout of brilliant blossoms. A large mass of these begonias, in beds slightly shaded by trees, showed all the luxuriance and floriferousness of those grown in the open block, and undoubtedly they are far superior, for such a position, to geraniums of any sort."

John Thorpe of Pearl River, N. Y., chief of the Bureau of Floriculture of the World's Fair, says—"I have always considered the tuberous begonias among the most beautiful of flowers; but now that a strain is produced that can be grown out of doors in full exposure to the sun, their value is incalculable. I predict for them a popularity beyond that of any flower ever before used for bedding purposes."

William Saunders, superintendent of the Agricultural Department at Washington, D. C., Professor William R. Smith of the Botanic Garden, Washington, D. C., and William Doogue of our own city, all speak in favor of these plants for bedding purposes.

I have brought to you these opinions of others as to the value of the tuberous begonia because I believe there is the greatest future before it of any plant of recent introduction, whether for the conservatory, the window garden or the open garden. I think one reason why it is not better known is that we have been too apt to think it would not flourish except under glass, and therefore it has not been given a fair trial as a bedder. We have grown it moderately at Forest Hills until last year; then quite extensively, having planted out some thousands of them in different parts of the grounds, in large and small beds and on graves, in all cases they were the best beds of flowering plants in the cemetery, affording a remarkable variety of color—white, yellow, orange, rose, scarlet and crimson, in numerous shades. Then their comparison with other flowers shows greatly in their favor. The geraniums thus far have taken the lead as the best bedders; but how a rainstorm destroys geranium flowers, especially of the single varieties! but with the begonias it is not so; they are bright again in twenty-four hours, flowers and foliage standing up in bright array.

At Forest Hills we must have large quantities of bedding plants and of the best. The introduction of the Crozy cannas and the tuberous begonia forms a great advance. It is to be hoped they will soon take the place of the faded coleus, and perhaps others may as well be spared, as they reflect no credit upon a well-managed place. I think there is very little character to the so-called "foliage bed." One can get material at a dry goods store, with which to produce as good an effect. I do not include in this remark the sub-tropical beds, but those filled with so-called foliage plants. Flowering plants are decidedly better. What "foliage" bed can compare with a solid mass of tuberous begonias, or a large bed with Crozy cannas in the centre, surrounded by a broad belt of heliotrope and tuberous begonias as a border? Such a bed is not only an object of beauty, and a delight to all observers, but if some cut flowers are desired, here they can be had. If one wishes a good bed of flowers, a bright vase, a cheerful window, or some choice cut flowers for decoration, the tuberous begonias will not disappoint either desire. As I have had no experience with double varieties, I have only made the slightest reference to them. We have need of only single varieties for our bedding purposes, and depend upon seedlings alone. Our method of culture has been as follows: The seed was sown Jan. 4, in shallow boxes, in light soil, sifted fine, covered very slightly and pressed down firm with a smooth board, then watered gently but thoroughly with Scollay's rubber sprinkler, and placed in a temperature of 60° and shaded from the sun. They germinated Jan. 24, and by Feb. 24 were ready, and were pricked out one inch apart, in other shallow boxes filled with the same kind of soil

as before. They were kept shaded until established, then they were grown in full sunlight, until the sun got very warm, when a little shade in the middle of the day was very beneficial. From these boxes they were shifted to deeper boxes —say three inches—and set four inches apart, and as soon as established, were exposed to all the light and air possible, in order to harden them off for planting out, which was done from June 1 to 15. They like a deep, rich soil and plenty of water, being gross feeders. After the frost has destroyed the foliage, the tubers can be lifted and gradually dried off in boxes, in plenty of air and light. When dry they should be packed in shallow boxes and stored in a dry, cool place. In the spring, when they show signs of growth, they should be potted in as small pots as will hold them, and shifted into larger pots as they require, until planted out. These directions will serve for the window gardener as well as the greenhouse culturist.

PLEASE WRITE on your printed letter head when addressing our advertisers. If you have no printed letter head, then enclose your business card or bill head.

DO YOU WANT a list of the leading cemetery superintendents? You will find such a list in our new trade directory and reference book.

DO YOU WANT a list of the leading park superintendents of America? You will find such a list in our new trade directory and reference book.

IF YOU wish to make sure that your spring trade list will be preserved by those who receive it, print it in the American Florist.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—By general greenhouse hand. Address PHILIP KIRCHNER, 349 Washington St., Williamsport, Pa.

SITUATION WANTED—As foreman or manager; 12 years' experience growing plants and cut flowers, carnations, roses, ferns, etc. Address T E, Ashbourne P. O., Pa.

SITUATION WANTED—By a practical gardener and florist, 26, married, German, in private or commercial place. Address M. JAHN, 13 James St., Springdale, Holyoke, Mass.

SITUATION WANTED—By a good German grower in roses, violets, carnations and vegetables, etc.; good landscaper, 30 years' experience; 2 children; good references. Private place preferred. CARL SCHAFFER, Deal P. O., N. J.

SITUATION WANTED—By a rose grower of long experience; thoroughly up in propagating and general greenhouse management; no family; strictly temperate; New England preferred. Address ROSARIAN, care Peck & Sutherland, 67 Bromfield St., Boston, Mass.

SITUATION WANTED—By a practical gardener and florist, age 35, married, no family; 20 years' experience in England and America. Thorough knowledge in roses, carnations, chrysanthemums, orchids, ferns, propagating vegetables and outdoor work. Sober and reliable. Good references. Private family preferred. Address HUMPHREY, 6921 Penn Ave., Pittsburg, Pa.

SITUATION WANTED By practical gardener and florist who devoted all his lifetime to that business, single, middle age, of good habits, successful rose grower; has great experience in cut flower business, capable to take charge of commercial place, if suitable; the greatest satisfaction assured. Satisfactory references. Address PRACTICAL FLORIST, 573 Butler St., Chicago.

SITUATION WANTED—By a head gardener on private place; married; has been with present employer 4 years; thoroughly experienced in greenhouses, lawns, vegetable garden; has been in some of the leading places in Europe and this country. Has references from each place to testify to my abilities. Address ROBERT JOHN ENGLISH, 59th St. and 2d Ave., South Brooklyn, N. Y.

WANTED—Single man for roses and carnations; $20 and board. ROSE, Westminster, Md.

WANTED—A gardener who can grow vegetables. Wages, half the profits. Give references. J. L. PILLSBURY, Macomb, Ill.

WANTED—Immediately, a single man with some experience in nursery business. Wages $30 a month. Address W. A. VANICK, Newport, R. I.

WANTED—Young man to take charge of palm house and assist in decorating. Also assistant for commercial place. THE FLORAL EXCHANGE, 614 Chestnut St., Philadelphia, Pa.

WANTED—A single man who is competent in growing roses, carnations and a general line of florists' flowers for the retail trade. Address I M., care American Florist.

WANTED—A young man who has had some experience in gardening and greenhouse work; English preferred. State wages, including board. FLORIST, box 44, Larchmont, N. Y.

WANTED—A successful rose grower to take charge of rose houses in vicinity of New York. Single man preferred. Address TIMPSON, Rural Publishing Co., room 140, Times Bldg, New York.

WANTED—In a large establishment near New York, a first-class and successful fern grower (specialist) to take entire charge of fern department. Address TIMPSON, Rural Publishing Co., Times Bldg, N. Y.

WANTED—A single man on or before April 1, 1893, one who is able to run a retail business (store or greenhouse). State wages expected and address J. H. ZSCHORNA, 627 De Kalb Ave., Brooklyn, N. Y.

WANTED—Immediately, a single man to grow carnations, roses and bulb stock for cut flowers. Will pay $12 to $20 per month with board. Permanent position to the right man. References required. OTTAWA FLORAL CO., Ottawa, Ill.

WANTED—A competent gardener to take charge of small place in the country; must understand care of flowers. Address in writing, giving references, wages desired and whether married or single. ALBERT M. DAY, 306 Erie St., Chicago.

WANTED—A competent man, married, as working foreman in commercial place; must be first-class rose grower. Address, with copies of references from former employers and wages required. GROWER, Welch Brothers, 2 Beacon St., Boston.

WANTED—A reliable single German florist who can speak English and do general greenhouse work and help at cut flowers and funeral designs. Give references. Good place for good sober man. J. J. VONDERSAAR, 675 Madison Ave., Indianapolis, Ind.

FOR SALE—I will sell my rooted cutting business, greenhouses, etc., at a bargain; well established, well advertised and growing. S. B. FIELD, Roselle, N. J.

FOR SALE—Unequaled opportunity for a live florist to purchase a small, well-paying established business. For all particulars address Box 432, Haverstraw-on-Hudson, N. Y.

FOR SALE—First-class florist and bird store doing strictly cash business; good trial given; owner sick, must sell. WM. C. FOGARTY, 736 Eighth Ave., New York, Bet. 45th and 46th.

FOR SALE Paying florist's business, large selected stock, good patronage, home and abroad, ¾-acre lot, good dwelling, splendidly located; best reasons for selling. Address PROF. BAGLEY, Abilene, Kans.

FOR SALE OR TO LEASE—Cut flower plant containing 30,000 feet of glass in Chicago; in first-class condition, all modern conveniences. Stock in fine condition for the World's Fair year. Address A. T. JACKSON, Bowmanville P. O., Chicago.

FOR SALE.

Seven acres of land with orchard of 200 fruit trees, mostly plums of different kinds, in good bearing condition. Two dwelling houses, one a two-story with stone foundation containing 15 rooms with all modern improvements; the other a one-story containing five rooms all in good order, intended for hired help. Also a windmill for watering, a ten pin alley, with a good arbor, barn 40x60. Soil is clay loam; will raise most any vegetation, strawberries, and raspberries especially. The place is intended for a summer resort or florist business, as the location has a beautiful view upon Lake Michigan and ten minutes drive to the city of Manistee, with 18,000 inhabitants. To avoid unnecessary correspondence, will say that the price is $10,000; the real valuation is $15,000. For particulars and information in regard to terms, correspond with OTTO BAUMANN, 469 So. Water St., Manistee, Mich.

FARFUGIUM GRANDE.

First-class plants. Price $8.00 per 100; $1.25 per dozen, by mail. Postage prepaid.

TILTON BROTHERS, 222 Grove St., Aurora, Ill.

ROSES.

TEAS . . . . . $30.00 per 1000
HYBRIDS . . . . . 40.00 per 1000

Healthy plants, in 2-inch pots.
Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.
Trade list on application.

Jacob Schulz,
LOUISVILLE KY.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

FORCING ROSES

Wideawake Florists will prepare now for next winter.

We make a specialty of all the leading sorts and can furnish healthy young stock to be shifted into one size larger pots on arrival at following prices:

$6 per 100 for Am. Beauty, White La France and Duchess of Albany.
$4 per 100 for Sunset, Mme. Hoste, Mme. Pierre Guillot, La France, Perle, Mme. Cusin.
$3 per 100 for Niphetos, Bride, Mermet, Bon Silene, Safrano.

Also all the famous new sorts: Bridesmaid, Mme. Testout, Kaiserin Aug. Victoria, etc. at lowest Market Prices.

Send List to be priced. Address

NANZ & NEUNER,
LOUISVILLE, KY.

ROSES.

NOW READY.

Fine, clean, 2½-inch stock.	Per 1000
American Beauty	$75.00
Augustine Guinoisseau (W. La France)	55.00
Meteor	45.00
La France	40.00
Perle des Jardins	40.00
Niphetos	40.00
Papa Gontier	40.00
Bride	25.00
Mermet	25.00

CARNATIONS—Out of flats.

Lamborn	$10.00
Portia	$10.00
Golden Gate	$10.00
White Dove	20.00

J. B. HEISS, Dayton, O.

I WILL OFFER CHEAP

FOR NEXT 30 DAYS,

The following Roses, rooted in December, and as fine and healthy stock as any grower can send out.

SEND FOR PRICES.

Bridesmaids, Sunsets, Brides, Niphetos, Mermets, Amaryllis of sorts, **Perles, Geraniums,** and **Florists' Seeds.**

Hydrangea grandiflora panicula, 2 years, 5 cts.
Deutzia rosea fl pl., Climbing Roses, 2 yr. 5c.

Address **E. HIPPARD, Youngstown, O.**

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST. . . . . .
ANCHORAGE ROSE CO., Anchorage, Ky.

3,000 PLANTS
OF
Jack Roses for Sale.

2 feet, $10.00 per 100. 2½ feet, 12.00 per 100.
3 feet, $15.00 per 100.
All well branched and on their own roots.

JORDAN FLORAL CO., - St. Louis, Mo.

ROSES.

Finest stock in Northwest.

Duchess of Albany,	Mme. Hoste,
La France,	Niphetos,
Catherine Mermet,	Perle,
Wabun,	Sunset,
The Bride,	W. F. Bennett

C. A. SMITH FLORAL CO.,
77 7th Street, South, MINNEAPOLIS, MINN.

NEXT WEEK comes our special rose number.

Because you were unsuccessful in growing "American Beauty" is no reason why you can't grow

"American Belle."

With the ordinary treatment, where nine times out of ten the "Beauty" would be unsatisfactory, the new rose will be entirely successful. Don't overlook that fact. And don't be afraid to send a small order. The same rate for twenty-five as for a hundred. Big and little, all welcome. Every grower in the country should have the "Belle" and your order should be in soon. Stock is large, but not unlimited, and the orders already booked are remarkable.

JOHN BURTON,
Chestnut Hill, PHILADELPHIA.

Golden Returns.

200,000 ROSES 200,000

We offer well established, healthy plants in below named and many other sorts:

From 2-inch pots, $ 3.00 per 100; $30.00 per 1000
From 3-inch pots, 6.00 " 60.00 "
From 4-inch pots, 12.00 " 120.00 "

Not in excess of any one variety.

50,000 Hybrid Perpetual Roses 50,000

at $4 per 100; $40 per 1000, in 50 select varieties.

New and Rare Varieties at Special Rates given in our Wholesale List, now ready.

WE NAME A FEW SORTS ONLY:

Aurora, Bosanquet, Comt. de Labarthe, Bon Silene, Cels, Devoniensis, C. Mermet, Etoile de Lyon, Hermosa, Mme. Cusin, H. M. Stanley, Malmaison, Marie Guillot, Mme. Lambard, Marie Lambert, Marechal Niel, Kruger, Niphetos, Mme. Jos. Schwartz, Safrano, Perle des Jardins, Sombreuil, The Bride, etc.,etc.

For anything in the Florist line, or send your lists to be priced. Address

NANZ & NEUNER,
LOUISVILLE, KY.

Roses of Rare Excellence; strong 1 and 2-yr., outdoor grown, budded and own roots. Leading Nurserymen call them "best ever seen." Shall we express sample?

	100	1000
Climbing, 2-yr., 3 to 5 ft., own roots	$8	$70
" 1-yr., 2 to 3 ft., own roots	7	60
Hyb. P., 2-yr., 2 to 4 ft., budded or own roots	9	85
" 1-yr., 1½ to 2 ft., " " "	8	75
Mad. Plantier, 2-yr., 2 to 4 ft., own roots	8	70
" " 1-yr., 1½ to 2 ft., own roots	7	60
Moss, 2-yr., 2 to 4 ft., budded or own roots	9	85
" 1-yr., 1½ to 2 ft., budded or own roots	8	75

Evergreens, 2, 3 and 4 feet, fine. Full Stock Fruit Trees, Ornamentals—Everything! Stark Bros., Louisiana, Missouri.

Hybrid Perpetual Roses,

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.

Price Lists to applicants. Address

WILLIAM H. SPOONER,
JAMAICA PLAIN, (Boston), MASS.

FORCING ROSES

All the old, and such new varieties as have been proved, kept in stock.

M. A. HUNT,
TERRE HAUTE, IND.

YOU CAN save money by printing your spring trade list in our columns.

ROSES. ROSES.

◎—PLANTS FOR FLORISTS.—◎

BRIDESMAID, strong, 2½-inch pot plants.....$12.00 per 100

	Per 100	Per 1000
METEOR	$4 00	$35 00
CLOTHILDE SOUPERT	4 00	35 00
PERLE DES JARDINS	5 00	40 00
CATHERINE MERMET	4 00	35 00
THE BRIDE	4 00	35 00
MARIE GUILLOT	4 00	35 00
NIPHETOS	4 00	

	Per 100
MME. HOSTE	4 00
HERMOSA	4 00
SOUV. DE WOOTTON	4 00
PAPA GONTIER	4 00
MME. PIERRE GUILLOT	4 00
ETOILE DE LYON	4 00
MALMAISON	4 00

General Collection of TEAS, BOURBON and POLYANTHAS in 50 leading varieties, $4 per 100; $35 per 1000.

	Per 100
GERANIUMS, in fine assortment, per 1000 $35,	$4 00
CANNAS, large flowered, French, in 15 varieties	8 00
" large flowered French, in 8 scarce sorts	15 00
" Madam Crozy	15 00
" Tall growing varieties	4 00
DAHLIAS, a choice collection, strong roots	8 00

	Per 100
CALADIUM Esculentum, 7½ to 10 in. circum	7 00
" " 6 to 7½ in. circum	5 00
" " 5 to 6 in. circum	3 50
BEGONIA Rex, in 12 named sorts	5 00
" Vernon	8 00
CARNATIONS, Edna Craig and Grace Battles,	12 00
POPPIES, Bracteatum and Royal Scarlet	8 00

Full assortment of Hardy Shrubs, Vines, Herbaceous Plants, Pæonies, etc. Large supply Hybrid Perpetual, Moss and Climbing Roses, field grown.

CATALOGUES AND PRICE LIST FREE.

THE STORRS & HARRISON CO.,
. . . . PAINESVILLE, Lake Co., OHIO.

ROSES. ROSES. ROSES.

• YOUNG • ROSES. •

LA FRANCE, MERMETS, BRIDES, HOSTE, GONTIERS, NIPHETOS, METEORS.

Beauties, Brunners, Laings and Magna Chartas.

25,000 Spring Roses, also dormant stock.

Write us for further information.

La Roche & Stahl 13th & Chestnut Sts., PHILADELPHIA.

ROSES

FINE HEALTHY PLANTS FROM 2¼-INCH POTS.

Perles, Brides, Mermets, Niphetos, Papa Gontier, Hoste, Watteville, Cusin, La France, Albany, Wootton, at . $5.00 per 100, $45.00 per 1,000.
Meteor at . . . . . $6.00 per 100, $55.00 per 1,000.
Climbing Perle, at . . . . . $10.00 per 100.

John Henderson Co.,

FLUSHING, N. Y.

PERLE ROSES.

ALSO BRIDES AND MERMETS.

No better stock in New York State. Orders solicited for April or May delivery, in 2½-inch pots; or in 4-inch pots June and July.

NIPHETOS, BON SILENE AND MME. HOSTE IN LIMITED QUANTITIES.

Salter Bros.,

42 W. Main Street, ROCHESTER, N. Y

Chicago.

The flower market here still keeps very fair; this week opened with a good trade, and prices do not show signs of dropping, except in some of the bulb stuff. Harrisii is extremely plentiful, almost a glut, though a good many of the flowers are small. Hyacinths are plentiful, also tulips; valley and freesia are not in oversupply. Violets are very plentiful; though they sell well the price is lessening. Carnations are a trifle scarcer; it is likely that they are being held back to some extent for Easter.

In roses supply and demand are about equal; Perles, Brides and Mermets are about the most plentiful varieties, and are generally good. Some fine Neyrons are in, and also Brunners. Jacqs are more plentiful, and fine in quality. There is not a great supply of Beauties, and they are very variable in quality. It is not expected that there will be any scarcity of flowers at Easter; although a good trade is anticipated it is likely that there will be plenty of flowers to fill all demands. About the end of this week prices will begin to stiffen a little, though it is not likely that there will be any very great difference from the trade of last year.

A quantity of orange blossoms from California and Florida were noted at one of the commission dealers; among them were unusually fine sprays in good condition, but the demand for these flowers is variable and limited.

THE ROSE NUMBER comes next week.

THIS is the very last call for advs. in the special rose number. Copy must be received by us not later than the 27th inst.

A CHOICE . . . . . CORNER LOT.

RARE CHANCE FOR THE WHOLESALE

ROSE GROWER

AT

CHATHAM, New Jersey.

At the SUNNYWOODS GREENHOUSES Two THOROUGHFARES intersect.

On one is a Good Color in bad weather. On the other a Good Price in bad times. The BRIDESMAID has grown here for FIVE YEARS with steady color and without deformity.

HEALTHY, STRONG YOUNG PLANTS.

From 2½-inch pots, 50 plants, $ 7.50 From 3½-inch pots, 50 plants, $ 10.00
From 2½-inch pots, 100 plants, 10.00 From 3½-inch pots, 100 plants, 15.00

FRANK L. MOORE, CHATHAM, NEW JERSEY.

MADAME CAROLINE TESTOUT.

The best rose of its color in existence. It has been fully tested in the New York market and

IT SELLS.

Healthy plants from 2½-inch pots now ready. Per 100, $25 00; per 1000, $200.00; 500 at 1000 rates.

ERNST ASMUS, West Hoboken, N. J.

Mention American Florist.

T. J. CORBREY & CO.,

45 LAKE STREET,

In Chicago Cut Flower Exchange. CHICAGO.

WHOLESALE AND COMMISSION FLORISTS

Now is the time to send in your orders for

EASTER FLOWERS.

Our stock will be very large and well selected. We have every facility for shipping promptly and packing goods in the best possible manner.

Consignments Solicited.

FOR EASTER, 1893.

The combined product of the most noted and successful growers for the New York market.

LILIES,
LILACS, VIOLETS,
CARNATIONS, DAFFODILS,
VALLEY, TULIPS,
ROSES.

EVERYTHING FOR EASTER.

Prices Right.

Quality Unsurpassed. Quantity Unlimited.

Shipping Facilities Unequalled.

If you wish to please your customers;
If the best is none too good for you;
Tell us what you want.
WE DO THE REST.

YOUNG BROS.,

20 West 24th Street, NEW YORK CITY.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

Corrections.

In last issue, on page 814, second line, middle column, read "Safrano" instead of "La France." Under head of New York, in paragraph in middle of page read "late plants" instead of "little plants," and in second following paragraph read "Don" for "Dorr." The address in advertisement of C. Eisele & Co., on page 830 should read 11th and Jefferson St., instead of 114 Jefferson St. In note on carnation Jacqueminot on page 810 it should have been noted that the variety originated with James McGregor. Messrs. Fisher & Co. were merely the exhibitors when the variety was certificated and are not the originators.

A REVISED EDITION of "The Rose," by the late H. B. Ellwanger, is now issued, with introduction by Geo. B. Ellwanger. It contains the substance of the former edition with additions bringing it down to date. The catalogue of varieties contains descriptions of 1,086 roses. This is without doubt the most comprehensive rose manual we have written from an American standpoint, and the charming get-up of the book is worthy of its attractive contents.

SOME Mermets and Brides equal to the very best produced by northern growers have been sent us by Messrs. G. W. Currey & Co., Nashville, Tenn. The Mermets were particularly fine and could not be better in color, form, stem and foliage. Messrs. Currey & Co. write that the coming fall they will be heard from at some of the big shows. If they enter such blooms as those sent us they will certainly stand a fair show of winning some laurels.

THE NEXT of our series of special numbers will be devoted to the rose, the "Queen of Flowers." It will be issued on March 30 and will take the place of our usual special spring number. We shall make this issue even handsomer than any of the special numbers yet issued and will spare no expense to make it worthy of the flower to which it will be mainly devoted.

FURTHER STUDIES OF YUCCAS, by Prof. Wm. Trelease, is a monograph of 226 pages, supplemented by 23 plates, issued recently by the Missouri Botanic Garden. It contains a further record of Prof. Trelease's researches into the pollination of this family of plants.

DO YOU WANT an alphabetical list of the chrysanthemums in commerce in America, with class and a brief accurate description of each one, and synonyms noted? You will find such a list in our new trade directory and reference book.

Fancy. Dagger.

2,000,000
HARDY EVERGREEN CUT FERNS,
Especially for Florists' Use.
SPECIAL ATTENTION PAID TO SUPPLYING THE WHOLESALE TRADE
FIRST QUALITY HARDY CUT FERNS, $1.25 per 1000. In lots of 5000 and upwards, $1.00 per 1000.
L. B. BRAGUE, Hinsdale, Mass.

Asparagus Plumosus Nanus.
CUT STRINGS: 6 to 8 feet long, 50 cents each. 10 to 15 feet long, $1.00 each.
In large or small quantities all the year round. The largest stock in the country.
W. H. ELLIOTT, Brighton, Mass.

Cape Flowers, new crop in best white quality at $1.25 the lb.; 10 lb. lots, $10 net.
Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 30-in. upwards, at 45c., 50c., 60c., 75c. and $1.00 each, according to length.
Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.
Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.
Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc. For prices consult our
Trade Catalogue, mailed free.
August Rolker & Sons,
136 & 138 W. 24th St., P. O. Station E. **New York.**

THE SMILAX KING!
Who? **KOFFMAN,**
Where? WALDEN. Orange Co., N. Y.
What? **SMILAX**
25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.
When? ALL THE YEAR AROUND.
And he pays the Express.

IF YOU NEED ANY
Cape Flowers, Immortelles, Grasses, plain or fancy Baskets, Metal Wreaths, Letters, Doves, or any other thing in the Florists' supply line, mail us your order.
REMEMBER WE ARE THE
Leading Manufacturers of Wheat Sheaves and Baskets, and Importers of Florists' Supplies.
Catalogue on application.
ERNEST KAUFMANN & CO.,
113 N. 4th Street, PHILADELPHIA, PA.

Always mention the AMERCAN FLORIST when writing to advertisers.

WHOLESALE FLORISTS
La Roche & Stahl
N. E. CORNER 13th & Chestnut Sts., PHILADELPHIA.

SAMUEL S. PENNOCK,
Wholesale Florist
REMOVED TO REAR OF 42 S. 16th ST., Philadelphia, Pa.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE
FLORIST,
1122 PINE STREET, St. Louis, Mo.
A complete line of Wire Designs.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STEET, St. Louis, Mo.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

H. BAYERSDORFER & CO.,
WHOLESALE
FLORISTS' SUPPLIES ONLY,
60 N. 4th Street, PHILADELPHIA, PA.
Our new Catalogue is now out, free upon application.

MARSCHUETZ & CO.,
FLORISTS' • SUPPLIES,
23 & 25 N. 4th St., PHILADELPHIA, PA.
Send for Catalogue.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.

	Per 100
Perle, Gontier, Niphetos	$ 5.00
Mermets, La France, Bride, Wootons	6.00
Meteors	8.00
Jacqs	12 50
Carnations, short	1.00
" long	2.00
" " fancy	2 50
Romans, Valley, Narcissus, Tulips	3.00
Violets, Adiantum	1.00
Callas, Harrisii	10.00
Smilax	15.00

Above prices in effect till March 29th only.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
116 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.: Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange.
45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY & CO.
Wholesale and Commission
FLORISTS,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

A. G. PRINCE & CO.,
Wholesale and Commission
FLORISTS,
45 LAKE STREET,
In Chicago Cut Flower Exchange. CHICAGO.

N. F. McCarthy & Co.
WHOLESALE FLORISTS,
JOBBERS IN . . . . . FLORISTS' SUPPLIES, FLORISTS' VASES.
METS, BRIDES, GONTIERS, CARNATIONS, ALWAYS ON HAND.
1 Music Hall Place,
BOSTON, MASS.
HORTICULTURAL AUCTIONEERS. . .

Mention the American Florist when writing to advertisers on this page.

Wholesale Markets.

Cut Flowers.

NEW YORK, Mar. 21.

Roses, Bon Silene, Gontiers	1.00@ 3.00
" Perles, Niphetos	2.00@ 4.00
" Mermet, Bride, Hoste	2.00@ 6.00
" Cusin, Watteville	2.00@ 6.00
" Bridesmaid	2.00@ 8.00
" La France	4.00@10.00
" Meteor	4.00@10.00
" Jacquemiot	6.00@12.00
" Beauty	10.00@40.00
" Morrison	15.00@20.00
" Hybrids	10.00@35.00
" Mme. Caroline Testout	10.00@20.00
Carnations	.75@ 1.00
Valley, hyacinths, tulips, daffodils	2.00@ 3.00
Harrisii	2.00@ 5.00
Callas	3.00@ 6.00
Violets	.50@ 1.00
Cattleyas	50.00
Mignonette	2.00@ 6.00
Adiantums	1.00
Lilac (bunch)	1.00

BOSTON, Mar. 21.

Prices at date same as quoted last week.
[Boston prices as quoted in advance for Easter:]

Longiflorum	20.00
Harrisii lilies and callas	15.00
Candidums	8.00
Cyclamen	2.00
Spiraea Japonica, Deutzia	3.00
Lily of the valley	4.00
Tulips	4.00
Daffodils, double	4.00
Poeticus	3.00
Hyacinths and narcissus	4.00
Mignonette	2.60@ 4.00
Myosotis	2.00
Pansies	1.00
Carnations	2.00@ 4.00
Stocks	3.00
Violets	.75@ 1.00
Roses, Niphetos	6.00
" Gontier	8.00
" Perle, Sunset	8.00
" Bride, Mermet	8.00@12.00
" Jacq., Hybrids	16 00@25.00
Smilax	25.00
Adiantum	1.00@ 1.50
" Farleyense	20.00
Asparagus plumosus	50.00
Heath, per bunch	50 to 75 cents
English primroses, per dozen bunches	$2.00
Orchids, very fine, per box, $10.00, $20.00, $2 .00	
Acacia pubescens	25.00
Orange blossoms	25.00
Palm crowns, very fine, per dozen	$5.00
Palm leaves	4.00
Needle pines	25.00

PHILADELPHIA, Mar. 21.

Roses, Perle, Gontier, Niphetos	4.00
" Mermet, Bride, Albany	6.00@ 8.00
" La France	6.00@ 8.00
" Hoste, Cusin, Watteville	4.00@ 6.00
" Bennett, Wootton, Guillot	6.00@ 8.00
" Meteor	8.00@10.00
" Beauties	25 00@40.00
American Belle	40.00@50.00
" Brunners	40.00@50.00
" Laing, Magna Charta	25 00@40.00
Carnations	1.00@ 1.50
Mignonette	1.00@ 2.50
Violets	.50@ 1.00
Valley	2.00@ 3.00
Daffodils	4.00
Tulips	4.00@ 5.00
Freesia	1.00@ 1.50
Callas, Harrisii	8 00@10.00
Adiantum	1.00@ 1.50
Asparagus	50.00@75.00
Smilax	15.00@20.00

CHICAGO, Mar. 21

Roses, Perles, Niphetos Gontier	3.00@ 4.00
" Mermet, La France, Albany	4.00@ 6.00
" Bride, Wootton, Bennett	5.00
" Beauty	12.00@20.00
" Jacqs	12.50@15 00
" Hybrids	25.00
Carnations (short)	1.00
" (long)	1.50@ 2.00
" (fancy)	2.00@ 3.00
Callas, Harrisii	10.00@12.00
Romans Valley	3.00@ 4.00
Violets	.75@ 1.00
Daffodils	3.00@ 4.00
Tulips	3.00@ 4.00
Freesia	3.00
Marguerites	.60@ 1.00
Mignonette	2.00
Smilax	15.00@18.00

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., **BOSTON, MASS.**

CUT SMILAX.
From Nov. 1st to May 1st our price for Smilax will be 20 cents per string. Quality first-class. Prompt attention to orders by wire.
J. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
The finest Roses, Violets and Carnations
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

HENRY W. BAYLIS,
Wholesale Florist
940 BRODWAY,
. . . . NEW YORK.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

The Seed Trade

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1889. Applications for membership should be addressed to Wm. Meggatt, chairman membership committee, Wethersfield Conn.

MR. Z. DE FOREST ELY has been confined to his house for the past ten days.

A. HERRMAN, of East 34th street, New York, is increasing his manufacture of metal wreaths.

LARGE ADVERTISERS for the mail trade complain of meager results in the way of new business this season.

O. H. WILL, the seedsman of Bismarck, N. D., has been elected president of the State Board of Agriculture of North Dakota.

THE spring trade, mail trade especially, is far behind the average for the season, in all the large eastern markets. When it does come it will be with a rush. Spring weather is all that is needed.

MONDAY, MARCH 13, was big day so far in the mail trade this spring, though the week preceding was a good one. It is now thought that Monday, the 27th, will probably be the largest day this season.

Catalogues Received.

C. H. Joosten, New York, fostite; H. A. Daacke, New York, seeds; Geo. G. Briggs, El Paso, Texas, cacti; Kankakee Mfg. Co., Kankakee, Ill., ice boxes; Chipman Bros., Sandwich, Mass., pond lilies; P. J. Berckmans, Augusta, Ga., plants; John Lewis Childs, Floral Park, N. Y., plants, seeds; Andorra Nurseries, Chestnut Hill, Phila., hardy trees, shrubs and plants; Meehan's Nurseries, Germantown, Phila., nursery stock; H. F. Michell, Philadelphia, seeds; Phil Strubler, Naperville, Ill., small fruit plants.

HARTFORD, CONN.—The Hartford Co., Horticultural Society will hold its spring exhibition at Unity Hall on Tuesday and Wednesday March 28 and 29.

RACINE, WIS.—F. Fountaine has sold his greenhouses and business to Ede & Benstead, who will continue same. Mr. Fountaine will remove to Washington.

FT. WAYNE, IND.—W. J. Vesey is building a new house 18x92 for chrysanthemums and carnations. Markey Bros. are adding a new carnation house 10x100. At the last meeting of the Northern Indiana Floral Club there was unfortunately no quorum and consequently no business was transacted.

PRINT your spring trade list on this page. It will be not only more effective but cheaper than a list printed and mailed by yourself.

THE AMERICAN FLORIST and *Gardening* together to one address for $1.75. Send orders to the American Florist Co.

Errata.

[Some errors were made in the printing of the essay of Prof. Geo. F. Atkinson on carnation diseases, published in our issue of February 23. The corrections appear below.]

Foot notes on second page, after "Croonian Lecture" read, *On some relations between host and parasite; proceedings Royal Society, Vol 47, pages 393-413.*

In figures 3, 4, 5 and 10 the objects are magnified 30 times more than the scale.

The legends of figures 4 and 5 should be interchanged.

On 3rd page in 2nd column 23rd line for "spiculus" read *apiculus.*

Figures 7 and 8, 2nd line 2nd column 4th page should read 8 and 7 to correspond with the illustrations.

In last line 1st column 5th page for "it will" read *well.*

On 5th page 3rd column lines 6 to 12 of the text should follow after last line of 2nd column.

On 7th page 1st column 2nd line of text for "scleroted" read *sclerotid*, and 2nd column 9th and 10th line from bottom for "Hyphomycetis" read *Hyphomyceles*, and 3rd column 24th line for anostomosing read *anastomosing.*

On 10th page 2nd column last line for "Saccordo" read *Saccardo*, and in 3rd column, foot notes, 5th and 6th line from bottom, 3rd series, Vol. 3, p. 151, should follow *Ibid* of line below.

IF YOU have not already ordered a copy of our directory and reference book you are missing a good thing that you ought to have. Remember that it contains not only a list of those in the trade but a vast amount of reference matter of great value to every reader of the FLORIST. The reference lists of roses, chrysanthemums and carnations are alone worth the price of the book.

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

PLANTS. FLOWERS.

Mendenhall, the Pioneer Florist of the Northwest, always to the front with the finest, healthiest, cleanest stock of Roses, Carnations, Smilax and all kinds of Bedding plants to be found. Prices low. Send for catalogue. Cut flowers at wholesale and retail. The pure air of Minnesota is good for man, beast and plants, and Minneapolis is the place, and Mendenhall Greenhouses is the name to address for anything good in the florist line.

MENDENHALL GREENHOUSES,
MINNEAPOLIS, MINN.

FOR SALE.
THE CUTS
USED IN ILLUSTRATING THIS PAPER.

Write for prices on any which you have seen in previous issues and would like,

AMERICAN FLORIST CO.
CHICAGO.

The Snow Crest Daisy fills the bill;
Test it any way you will;
However you must grow it cold;
Then its mammoth size will hold.

Every florist should invest
In this Daisy; 'tis the best;
For design work so complete
There's really nothing quite so neat.

CUT BLOOMS, $1 PER 100, POST FREE.

Large stock fine plants all in bud and blooming, 15 for $1.00; 100 for $5.00; sample plant and bloom for 12c. Double fringed petunias, Dreer's, mixed, all colors, stock plants, 3-inch, strong, 60c. per doz.; $4 per 100; smaller from flats, $2.50 per 100; rooted cuttings, $1.10, post free. The florist double white forcing Petunia, white as the driven snow, fringed and delicately scented, valuable for cutting, design work, etc., stock plants, $1 per doz.; from flats, $3 a 100; rooted cuttings, $1.50 per 100. Double Golden Marguerites, the genuine dwarf, large flowered, stock plants, 60c. per doz., $4 per 100; smaller from flats, $2 per 100; rooted cuttings, $1.10, post free. Double Dahlia Sunflower (Helianthus multiflorus), rooted pips ready for potting, 50c. per doz., $2.50 per 100. French Cannas, Fairmount Park strain, reds in variety, dry roots ready for potting, 50c. per doz., $3 per 100; large flowered yellow, mixed, plain blotched, striped; these are extra fine showy kinds, 60c. per doz. $4 per 100; a few extra fine bronze-leaved kinds, 60c. per doz. Variegated Vincas, field-grown, 3-inch, $5 per 100; small from flats, $2 per 100. Coleus, Fuchsia, Stevia, Alyssum, double and single, Gem, Feverfew and miscellaneous rooted cuttings, $1 per 100, small pits, $2 per 100. Rooted cuttings per 100 and small plants per doz. post free if desired. Safe arrival and satisfaction guaranteed or money refunded.

Address J. C. GIBSON, Woodbury, N. J.

Received March Importation of
MUSHROOM SPAWN.

Per lb. 15 cts.; 10 lbs. for $1.20; 100 lbs. $8.00.

W. W. BARNARD & CO.,
Office: 6 & 8 N. Clark St., Warehouse: 186 Kinzie St.,
CHICAGO.

Are You a Fruit or Flower Raiser?
For Market or Pleasure—

If so, send for our Circular on Fungicides and Insecticides, which are cheap and reliable. Agents in every State. Special Fertilizers for Fruits, Flowers and Vegetables. Agricultural Chemicals. W. S. POWELL & CO.,
Chemical Fertilizer Manufrs, Baltimore, Md.
S. F. LEONARD, Seedsman, Agent,
Chicago, Ill.

SEEDS AT WHOLESALE.

Our wholesale price list, to the trade only, of Garden, Flower and Field Seeds in bulk will be forwarded on receipt of your application. Address

CROSMAN BROS.,
ROCHESTER, N. Y.

The New White Rose
KAISERIN AUGUSTA VICTORIA.

From 2-inch pots, $25.00 per 100. 5-inch pots, $5.00 per dozen; $40.00 per 100.

THE NEW VIOLET
ROBERT GARRETT,

The healthiest and strongest growing violet up to date; strong, well-rooted runners, $3.00 per 100; transplanted runners, $4.00 per 100. Cash with order.

JOHN COOK,
318 N. Charles St., BALTIMORE, MD.

—MORE THAN—
1,000,000 TREES
Fruit and Ornamental. SHRUBS, VINES, ROSES, etc., in over 1,000 Varieties.
New and Rare. Old & Reliable. | Send for our Illus. Catalogues.
W. S. LITTLE & CO. ROCHESTER, N. Y. or 15 E. 11th St. N. Y. City

TUBEROUS ROOTED BEGONIAS.

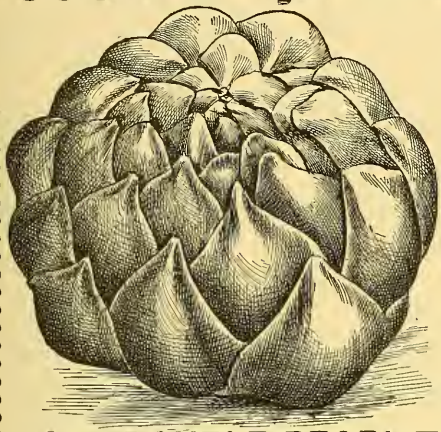
Best selling stock for Retail Florists. Order now and start into growth for early sales. Sell like hot cakes when in bloom. Try them if you never have. If you have, then you know it. In large quantities; choicest quality.

SINGLE, 5 separate colors, white, yellow, scarlet, pink and crimson.....$6.00 per 100; $50.00 per 1000.
DOUBLE, in 5 separate colors.....$16 00 per 100. (Can be mailed for 30 ct s. per 100)

F. R. PIERSON COMPANY, TARRYTOWN ON THE HUDSON, NEW YORK.

Lilium Auratum or Golden Japan Lily.

500 Cases just arrived direct from Japan.



In splendid condition, and ranging in size from 10 to 11 inches in circumference. Each case contains 50 BULBS, and will keep perfectly sound until June.

We regard THIS SHIPMENT as the finest we have ever IMPORTED, and you will miss a RARE OPPORTUNITY if you do not secure some of these CHOICE BULBS.

Price per case, $6.50.

5 Cases at $6.25. 10 Cases at $6.00.

25 Cases at $5.75. 50 Cases at $5.50.

100 Cases, 50 Bulbs each

Lilium Speciosum Rubrum,

Ranging in size from 10 to 12 inches in circumference. Per case, $7.00, or 5 cases at $6.75.

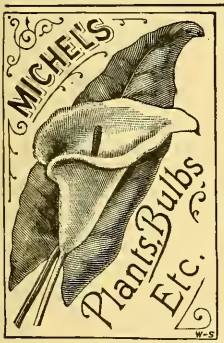
100 Cases, 50 Bulbs each

Lilium Speciosum Album,

Ranging in size from 9 to 11 inches in circumference. Per case, $7.50, or 5 cases at $6.25.

Also DOUBLE PEARL TUBEROSES, 4 to 7 inches in circumference at $9.50 per 1,000.

ROBERT BUIST. Importer and Grower, Warehouse—922 and 924 Market Street, **Philadelphia, Pa.**



Write for wholesale list.

MICHEL PLANT AND BULB CO., ST. LOUIS, MO.

WE SELL SEEDS

TO FLORISTS AND DEALERS.

WEEBER & DON,

SEED MERCHANTS AND GROWERS,

114 Chambers St., New York.

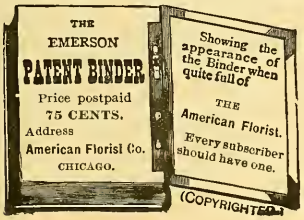
Catalogues on Application.

BENJAMIN RIMBAUD, BULB GROWER,

Quartier du Temple, Toulon, var, France.

Cable address **Beurimbaud, Toulon.**

The largest cultures in the South of France, of **WHITE ROMAN HYACINTHS,** Narcissus Paper White grandiflora, N. Double Roman, N. **Double Von Sion**, true pure yellow, and other Daffodils. **Lilium Candidum**, the largest bulbs. Freesias, Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A. Double Rosette the earliest, etc. Prices on application.



Send for Catalogue of **JAPAN BULBS, SEEDS, AND SHRUBS.**

ARAUCARIAS, AUSTRALIAN Palm Seeds,

CALIFORNIA BULBS AND SEEDS to

H. H. BERGER & CO.

ESTABLISHED 1878. SAN FRANCISCO, CAL.

Mention American Florist.

G. J. MOFFATT,

Manufacturer of

PAPER BAGS AND ENVELOPES

Special attention given to

Seed Bags and Catalogue Envelopes.

NEW HAVEN, CONN.

MEECH'S TUBEROUS BEGONIAS.

The Finest Strain in Existence.

For Prices see American Florist for January 26th, 1893.

SEED ALL SOLD.

Catalogue about March 15th.

F. J. MEECH & SON,

Charlevoix, Mich.

HULSEBOSCH BROS.,

BULB AND PLANT GROWERS,

OVERVEEN, near Haarlem, HOLLAND.

Prices on application for the coming season of

ROMAN HYACINTHS,	PAPER WHITE NARCISSUS,
LILY of the VALLEY,	HARRISII LILIES,
LIL. LONGIFLORUM,	TULIPS,
DUTCH HYACINTHS,	CROCUS,
SPIRAEAS,	ROSES, ETC., ETC.

☞ Spring Catalogue now ready. ADDRESS

A. HULSEBOSCH,

P. O. Box 3118. Warehouse 58 West Street,

NEW YORK CITY.

TUBEROSES.

☞ We are headquarters.	Per 100.	Per 1,000
1st size Dwarf Pearl	$1 50	$12 00
2d size "	80	6 50
1st size Tall Pearl	1 20	10 00
Gladioli, extra large, finest sorts	1 25	12 00

H. G. FAUST & CO.,

64 and 66 N. Front St., PHILADELPHIA, PA.

WOODLAWN FARMS, 1,300 ACRES.

Mention American Florist.

Still Singing the Old Song.

The *Standard Union*, of Brooklyn, N. Y., regales us with the story of a lady whose florists' bill for the month of January was $500, and then remarks that "The profit which the florist made on this single bill can hardly be estimated, since it is extremely fashionable to pay a big price for flowers."

Further along it waxes hot over "the large amount of free advertising which the florists get from the newspapers" whereas all other "*tradesmen*" must pay for their advertising, and concludes as follows:

"It would be just as consistent to publish the name of the family dressmaker and shoemaker in writing up a reception, wedding or tea, as to be constantly putting in the name of florist and caterer. Florists and caterers, especially in Brooklyn, get rich fast, owing to the enormous amount of free advertising they get. The newspapers have made the florists and caterers; what have the florists and caterers done for the newspapers?"

With the caterers we have nothing to do; they are undoubtedly able to care for themselves. But we might say in reply to the plaintive enquiry as to "what the florists have done for the newspapers," that the florists have furnished the newspapers with a theme on which meddlesome correspondents can display their ignorance. No other industry has suffered from interference and misrepresentation by unscrupulous and ignorant writers as has that of the florist. All over the country for years and years the changes have been rung on the "enormous profits," the "getting rich fast," the "fabulous wealth" of the greedy flowermen, until now in the eyes of a large part of the public, the man who undertakes to make an honest living as a florist is little better than an extortionist. So much for "free advertising." The correspondent above quoted has practically informed the lady referred to that her bill was far in excess of the value of the goods received. By what right does he assume that an unreasonable profit was made on the transaction? And *where* do people pay large sums of money to florists, not for value received, but because "it is extremely fashionable to pay a big price for flowers?"

So "the newspapers have made the florists!" Yes, they have; by the yarns and romances of easily acquired wealth with which they have permitted prattling correspondents to fill their columns they have done their full share in enticing into the already well-filled ranks a multitude of people who have afterwards found to their sorrow that they had better stayed where they were, as "family dressmakers, shoemakers" and other "tradesmen." What the flower trade suffers from as much as from anything is unwarranted and meddlesome interference on the part of those who do not know what they are talking about.

ROOTED CUTTINGS.

READY NOW.

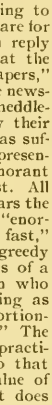
CARNATIONS.—Lizzie McGowan, Aurora, Golden Gate and Portia.
COLEUS—Twenty-two tip-top bedders, $7.00 per 1,000.
PETUNIA.—Choice Double $3.00 per 100.
CANNA.—New Dwarf, French varieties at $1.50 per 100, $35.00 per 1,000.

Ready March 27th and later.

CARNATIONS—Lizzie McGowan, Puritan, Aurora, Grace Darling, Tidal Wave, Daybreak, Fred Dorner, Portia, Louise Porsch, Golden Triumph, Golden Gate, Anna Webb, J. R. Freeman.
COLEUS—Twenty-two tip-top bedders, $7.00 per 1,000.
GERANIUMS.—Choice collection of named varieties, large percentage Scarlet and Pink, $12.50 per 1,000, $2.00 per 100.
SMILAX.—Transplanted plants, a rare bargain at $6.00 per 1,000, 75c. per 100.

Stock First-class Prices Reasonable. Write at once.

L. B. 496. **ALBERT M. HERR, LANCASTER, PA.**



Our little book, "Musbrooms for the Million," 16 pages, free to all. Robinson's Mushroom Culture, 50c. Falconer's $1.35. **A trial brick** of spawn and our little book on growing, free by mail for 25c. 5 lbs. for $1.00; by express, 10 lbs., $1.20; 25 lbs., $2.75; 50 lbs., $5.00; 100 lbs., $8.00. **Special rates on large lots.**

Gardiner's

Celebrated English

Mushroom Spawn

is acknowledged to be the finest in the world. Why waste your money on doubtful quality when you can get the best at a price that will please you? Always fresh, well spawned and can be thoroughly relied on to produce **a fine crop of the best mushrooms.** We sell at **rock-bottom prices for first quality spawn.** One pound of spawn will plant about six square feet of bed. ☞ All kinds of Seeds and Bulbs for florists, truckers and dealers. Catalogues free. JOHN GARDINER & Co., Seedsmen, Philadelphia, Pa.

☞ $2.50 has been the price of the brass-tipped hothed thermometer illustrated here. We have had a large lot made specially, and have secured such a rebate in cost that we can now offer them for $1.50 each. Mailing 5c. each, extra, but we recommend express shipment as somewhat safer.

TUBEROUS BEGONIAS.

Griffin's unequalled strain. The only Begonias offered that are grown out doors in America. Two first-class certificates at the last meeting of the Society of American Florists. Descriptive list free.

$6.00 per 100, $50.00 per 1,000 for first quality, large tubers, in separate colors.

This quality is better than Imported Tubers at the highest prices.

J. WILKINSON ELLIOTT,
PITTSBURG, PA.

NOTICE.

We can furnish **HANGING BASKETS** good and strong cheaper than can be bought elsewhere.

10 inch	$1.00	per dozen.
12 "	1.25	"
14 "	1.50	"
16 "	2.00	"

Address **FRED. GEAR,**
399 Vine St., **Cincinnati, Ohio.**

ROOTED CUTTINGS

Of the Best Old and Most Promising new varieties of

CARNATIONS.

Write for a catalogue and send list of wants for an estimate.

J. J. Styer,
CONCORDVILLE, PA.

ROOTED CARNATION CUTTINGS.

NOW READY.

Of the best old and new varieties now in cultivation, in small or large quantities. Send for estimate of wants or price list.

ISAAC LARKIN, Toughkenamon, Pa.

ROOTED CUTTINGS

GOOD ONES.

Verbenas, 22 varieties	per 100, $8.00, per 100,	$ .90
Coleus, 12 varieties	"	1.00
Double Alyssum	"	.75
Chrysanthemums, 40 varieties	per doz.	.20
Fuchsias, 10 varieties	"	.20
Heliotrope, 4 varieties	"	.20
Cigar Plant	"	.20
Manettia Vine and Mexican Primrose	"	.25

I. L. PILLSBURY, Macomb, Ill.

VIOLETS.

Single Blue, best Hamburg forcing, per doz. 50c.; per 100 $2.50.

ROSMARINUS, strong, out of pots, dozen, $1.00.

CHRYSANTHEMUMS, Rooted Cuttings, L. Canning, Japanese, white, very fine for commercial or pot plants, per 100 $1.50. Cash with order.

A. OELREICH, Quincy, Ill.

Michigan Wild Flowers.

TRANSPLANTED.

Cypripediums, 5 hardy species, can be grown out or indoors. Water Lilies, Wild Roses, Trilliums, Ferns, Asters, Trees, Shrubs and Aquatics. Send for list.

W. A. BROTHERTON & CO., Rochester, Mich.

ROOTED CUTTINGS:

MARIE LOUISE VIOLETS,

Healthy Stock.

Ready after March 17th.

E. P. HOSTETTER,
Manheim, Lancaster Co., Pa.

E. G. HILL & CO.,

Wholesale Florists,

RICHMOND, INDIANA.

PANSIES.

In bloom from **best** strains, in prime condition, from cold frames, $25.00 per 1000, $2.75 per 100. Satisfaction guaranteed, f. o. b.

W. J. ENGLE,
Box 211, Dayton, Ohio.

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

Always mention the American Florist when writing to advertisers.

CARNATIONS ❋ AHEAD.

You want the best in the market! We have them, 16 Novelties of '93, and all the STANDARD VARIETIES! Send for our complete Price List.

GEORGE HANCOCK, Grand Haven, Mich.

Rooted Cuttings.

Carnations Hinze's White, Mrs. Fisher, Silver Spray, Jeannette, Grace Wilder, Fred Creighton, Mayflower, Century, Anna Webb, $1.50 per 100; $10 per 1000.

Orange Blossom, Portia, Hector, Florence, American Flag, $2 per 100; $15 per 1000.

Coleus, leading varieties, including the finest Yellow Coleus in cultivation. A new variety equal to Golden Bedder in color, and as good a grower as C. Verschaffeltii, $1.00 per 100; $8.00 per 1000.

Double Petunias in four finest varieties, $2.00 per 100.

Fuchsias, finest named varieties, $1.50 per 100.

Heliotrope $1.00 per 100.

Ageratum, Dwarf, White and Blue, $1.00 per 100.

500 at 1000 rates. Cash with order. 10 cents per 100 extra when shipped by mail.

JAMES HORAN, Florist,
BRIDGEPORT, CONN.

Mention American Florist.

CARNATIONS

ROOTED CUTTINGS.

Puritan, Aurora, Golden Triumph, Grace Darling, Daybreak, Pearl, White Wings, Lizzie McGowan, Louise Porsch, W. F. Dreer, J. R. Freeman,
and many other varieties; fine, healthy stock, ready January and after.

HYBRID PERPETUAL ROSES

500 Paul Neyron, strong plants....$10.00 per 100.
20 other leading varieties.....$10.00 per 100.
$90.00 per 1000.

☞ Send for price list.

WOOD BROTHERS,
Fishkill, N. Y.

W. R. SHELMIRE, Carnation Grower

AVONDALE, CHESTER CO., PA.

Send for price list of Rooted Cuttings.

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

CARNATIONS

ROOTED CUTTINGS.

Send for Price List of all the leading varieties.

WM. SWAYNE,
P. O Box 226. KENNETT SQUARE, Chester Co., Pa.

	Per 100	Per 1000
CARNATIONS, standard varieties	$1 00	$9 00
NEWER KINDS.....	$1.50 to 2 00	
COLEUS.....	75	6 00

Send for prices on Chrysanthemums, Alternanthera, Snow Crest Daisy, etc.

JOHN J. CONNELLY, Bryn Mawr, Pa.

THE NEW WHITE CARNATION

GOV. RUSSELL

A SEEDLING OF 1888.

NOW READY FOR DISTRIBUTION.

Price of Rooted Cuttings: Per 1000, $80; 500 at 1000 rate; per 100, $10; 25 or less, $2 per doz.

ORDERS WILL BE FILLED STRICTLY IN ROTATION.

FOR SALE BY

N. F. McCARTHY & CO., 1 Music Hall Place, Boston, Mass.
C. J. PENNOCK, Kennett Square, Pa.
AUGUST ROLKER & SONS, New York.
and E. H. HUNT, 79 Lake Street, Chicago.

PLANTS CAN BE SEEN AT THE ESTABLISHMENTS OF ANY OF THE ABOVE NAMED.

Orders Booked Now for My Specialties

FOR 1893.

New Jersey.—A scarlet Carnation hard to beat.....$12.00 per 100

Old Rose.—Old rose pink Carnation. .....$12.00 per 100

Nellie Bowden.—Pure bright yellow Canna.....$60.00 per 100

READY IN FEBRUARY.

Other varieties of Carnations, both old and new

JOHN McGOWAN,
. . . . . ORANGE, N. J.

SEE OUR PRICE LIST

in special carnation number of Jan. 19th, or address

EDW. SWAYNE, Carnationist,
. . . Kennett Square, Pa.

Rooted Carnation Cuttings.

WHOLESALE PRICE LIST NOW READY,

Containing a full list of best new and old sorts, including the Prize takers at MADISON SQUARE and PHILADELPHIA.

Address **H. E. CHITTY, Paterson, N. J.**

GRACE BATTLES

and over 60 other varieties of

CARNATIONS

offered the Wholesale Trade.

My list embraces the best Standard and New kinds, including some of particular interest to growers of seedlings. Correspondence and personal inspection solicited.

C. J. PENNOCK,
The Pines. Kennett Square, Chester Co., Pa.

Carnation Cuttings.

Healthy stock, well rooted, ready to ship now.

Hinze's White.....	per 100,	$1.25;	per 1000,	$10.00
Grace Wilder.....	"	1.50;	"	12.50
Portia.....	"	1.50;	"	12.50
Anna Webb.....	"	2.00;	"	15.00
Lizzie McGowan.....	"	2.00;	"	15.00
W. F. Dreer.....	"	2.50;		

THOMAS DeWITT,
(Successor to DeWitt Bros.) **BRISTOL, PA.**

ROOTED CUTTINGS

and 2-in. stuff our specialty. What do you want? Healthiest Verbenas in the West $2.00 per 100.

Euclid Ave. Greenhouses, 38 Euclid Ave., Kansas City, Mo.

ROOTED CUTTINGS of CARNATIONS

By the Wholesale.

Ready now. This is the best time for intending buyers to supply themselves. offer them at moderate prices. Send for Price List. Address

JOSEPH RENARO, Unionville, Chester Co., Pa.

Look Here!

10,000 PEACH TREES, leading kinds, largely Globe and Crawford's Late.

5,000 IRISH JUNIPER, fine, 1 to 5 ft.

Siberian and American Arbor Vitæ, in car load lots, large enough to make screens as soon as planted. Prices given on application. I am in the market to sell.

W. P. BRINTON, Christiana, Pa.

Mention American Florist.

St. Louis.

Trade still continues fair, southern shipping still being good; it is expected to remain so until after Easter, when the return of the visitors and the increasing heat of the season renders shipping impossible. The plant trade, both mail and express, continues to remain behind what it was this time last year; it was picking up somewhat, but a belated cold wave, and snow on the 17th of March caused a decided falling off again. Most all the firms are looking for warmer weather, both to enable them to work their large stocks into frames as well as clean up all orders on hand.

Prices for Lent remain steady, although we hear of roses coming from the Chicago Cut Flower Exchange at $2.50 per 100. The quality, to say the least, reflects rather severely on the grower sending them in. An order was placed last week for 3500 boutonnieres by a large retail clothing house, and filled with Chicago stock; the price was made so low that local firms could not think of touching it. It is understood that the above were presented to customers and in that case no grumbling at quality was admissible.

The Jordan Floral Co. have commenced cutting from one of their Jack houses, and will be able to continue cutting in quantities during Easter, and the balance of the season. Their Easter stock is well advanced, their showing of lilies being especially good. The head of the firm, Mr. J. M. Jordan, has been nominated to represent the 24th ward in the House of Delegates, and if elected we are sure will serve to the credit of himself and the profession.

The criminal action brought by the Michel Plant and Bulb Co. against John Mackey, Superintendent of the Berry-Horn Coal Co's. yard, charging him with giving short weight, came before the court after several postponements. After hearing the arguments the case was dismissed as the prosecution failed to prove that there was any understanding between the superintendent and the company, whereby the former received any gain from the transaction. This, it appears, must be proven in a criminal action, whereas in a civil action it would be unnecessary. After the dismissal of the case suit was immediately filed against the Michel Plant and Bulb Co. for $10,000 damages, defamation of character being alleged. R. F. T.

Tuberous Begonias.

Seedlings, best strain, Single or Double, mixed colors per 200, $3.00. Another strain, Singles, separate colors, $3.00 per 100; mixed, $2.50, sent by mail.

BRAUER & RICHTER, McConnellsville O.

COLEUS AND GERANIUMS

Cuttings and potted plants.
Wholesale and Retail. . . . .

CHAS. A. BAIRD, Manalapan, Mon. Co., N. J.

IPOMŒA PANDURATA,

(Day Blooming Moon Flower.)

Northern grown, fresh and sound, per 1,000, $20.00, 500 at 1,000 rates; per 100, $2.50, 50 at 100 rates; Barr's Mammoth Asparagus, one year, per 1000, $2.50. Conover's Colossal, 2 years, $3.00 per 1,000.

JAMES FROST,
Greenville, Darke Co., O.

Hold on!

. . . EASTER is most here, for which I offer

PALM LEAVES, PALM CROWNS, LONG NEEDLE PINES, WILD SMILAX, HARDY CUT FERNS, ETC., ETC.

H. E. Hartford,

18 Chapman Place, BOSTON, MASS.

Trees and Plants.

Parsons & Sons Co.,
LIMITED,
Flushing, N. Y.

Selected Specimens of Rhododendrons, Japanese Maples, American Holly.

For other Rare Trees and Shrubs, see Catalogue.

FOR SALE.

ALTERNANTHERA P. MAJOR, AUREA NANA ROSEA (New), per 100, $2.00; per 1000, $18.00.
PELARGONIUMS, strong 2-in. pots, $1.00 per doz., free by mail.
MME. SALLEROI GERANIUMS, strong, 2 in. pots, per 100, $3.00; 200 for $5.00.
ACHILLEA "THE PEARL," rooted cuttings, per 100, $1.00, free by mail.
A few hundred carnations, 2-in. pots, per 100, $5.00. Varieties: Lamborn, Grace Wilder, Am. Flag, Portia, Garfield, Silver Spray, Hinze's White.

C. G. NANZ.
OWENSBORO, KY.
Mention American Florist.

FOR SALE OR EXCHANGE.

Peony roots, white, pink, maroon and rose, good divided roots, $5 per hundred. Full size, two year clumps, $18 per hundred. Will sell for cash or exchange for small stuff. Write for particulars.

WANTED.

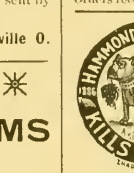
Acacia Riceana, Bambusa Nana, Azara Microphylla. Anyone having one or more of the above please send description of stock and state price.

THE WISCONSIN FLOWER EXCHANGE, Milwaukee, Wis.

BEST GERMAN PANSIES.

From seed bench; strong plants in 50 sorts, 75 cents per 100; $5.00 per 1000.

JOHN P. TONNER,
. . . . MONT CLAIRE, ILL.
Orders received in English, German and Danish.



Kills Mildew and Fungus Growth. What does? **GRAPE DUST.** Sold by Seedsmen.

Mention American Florist.

STOTT'S DOUBLE SPRAYER

Read Advertisement in Next Week's Issue.

ESTABLISHED 1876.

Water Lilies AND Lotus.

Tubers and plants of all the choicest varieties. New yellow water lily, Nymphæa odorata sulphurea, 75c. each. N. chromatella, 1st size, $1.00 each, $10.00 per doz.; 2d size, 60c. each, $5.75 per doz. Papyrus antiquorum, strong crowns, California grown, $25.00 per 100.

WATER LILY SEEDS.

Nymphæa gracilis (new, white), $1.00 per trade pkt. Nymphæa Zanzibariensis, extra dark purple strain, 50c. pkt., $6.00 per oz. N. Zanzibar azurea, 50c. pkt., $5.00 per oz. N. Zanzibar rosea, 50c. pkt. N. dentata, 50c. pkt. Victoria regia, $2.25 per doz. Nelumbium roseum, $2.00 per 100 seeds.

RARE GREENHOUSE VINES.

Schubertia grandiflora, $5.00 per doz., $35.00 per 100. Tecoma Makeni, $1.50 per doz. Solanum Wendlandi, 50c. each. Everblooming Bougainvillea, 50c. each. Send for catalogue of aquatics.

Edmund D. Sturtevant,
BORDENTOWN, N. J.

Asparagus Roots

	Per 100
COLOSSAL, two years old	$4.00
" one year old	3.00
PALMETTO, two years old	6.00
" one year old	5.00

Orders booked in rotation as received and roots forwarded soon as the weather will permit. Prices are for roots delivered f. o. b. Cash on receipt of the roots.

CROSMAN BROS., Rochester, N. Y.

ASPARAGUS PLUMOSUS NANUS.

Fine plants, from 5 to 6-inch pots...$7.00 per dozen.
Strong plants, from 4-inch pots.... 4.50 " " " from 4-inch pots.... 35.00 per 100.

CLIVIA. Splendid New Varieties.

1 and 2 year old plants, $3.00 and $5.00 per dozen. Large plants from $1.00 to $5.00 each.

ARUNDO DONAX.

Variegated, good roots, $2.00 per dozen.

EULALIA UNIVITTATA. $3.00 per 100.

CASH WITH ORDER.

ALEX. SCOTT, Lauraville, Balto. Co., Md.

CHRYSANTHEMUMS.

ROOTED CUTTINGS.

Lincoln, Ada Spaulding, Domination, L. Boehmer, Robaillon and 20 other good market sorts, $1.50 per 100; Jessica and Ivory, $2.50 per 100. Ready for delivery January 15th.

Address J. G. BURROW,
FISHKILL, N. Y.

VERBENAS, $2.50 per 100; $20.00 per 1000.

CANNAS, assorted, French, $3 per 100.
PELAGONIUM Fred Dorner, fine plants showing bud, $10.00 per 100.
ROSES, H. P's, Climbers, Forcers.

JOSEPH HEINL, Jacksonville, Ill.

Mention the American Florist when writing to advertisers on this page.

NOVELTIES IN CANNAS.

These four sorts are unquestionably by far the best varieties that have been sent out since the introduction of Mme. Crozy; they are all equally good, if not superior, but entirely distinct in every way.

FOR the past two or three years we have made the improved varieties of Cannas a specialty, and have gathered together for trial everything that has been offered that we have considered promising, and in pursuance of our usual policy of working up large stocks of the best things after thorough trial, have pleasure in offering the following novelties which we can recommend, and which our customers can purchase with entire confidence and can recommend them to their customers, as they are novelties of extraordinary merit and will give unquestioned satisfaction. The improvement in this class of plants is so marked there will be no place for the so-called French Cannas that were grown even two or three years ago, from this time out. Every florist in the United States who sells plants should invest in these Cannas to a greater or lesser extent. They make one of the finest plants for the decoration of the greenhouse that one can have, and the flowers can be used for cut flowers in decorative work with most telling effect, as there is nothing that approaches them in brilliancy and grandeur. For bedding plants for grouping on the lawn they are brighter than any other plant, and unite, with brilliant flowers, foliage of tropical luxuriance. We introduced Mme. Crozy very largely last season, and everyone who purchased it has been more than pleased with it. We have without question the largest stock of Mme. Crozy to be found anywhere, and can furnish it in any quantity. We now offer four novelties for this season, which we have propagated extensively, believing them to be the best and most distinct and valuable kinds in their respective colors that have been sent out since Mme. Crozy.

ALPHONSE BOUVIER.—This is the grandest Canna, all things considered, introduced up to this time. It is a very luxuriant grower, growing considerably taller than Mme. Crozy, throwing up flower stems freer than that variety. In good ground and under good cultivation the plant will grow eight feet. The tips of the shoots are surmounted by immense clusters of bright crimson flowers of the very largest size, and nothing can exceed their brilliancy. It has a peculiar habit of dropping the flower cluster a trifle as the second flowering shoot begins to push above the first, and the shoots flower two, three or more times, one after the other, a large plant in bloom sometimes having on as many as thirty or forty of these large brilliant clusters of flowers. Grand is the only word that describes this variety. It was sent out very little last Spring, but there was no supply of it to be had at anything like a reasonable price, and we purchased all we could obtain of it, paying as high as $1.25 each for it; but there was none to be had even at this high price. We were fortunate, however, in securing a larger supply of it than any one else, and are pleased to say we can offer it at a low price the coming season. We think for general bedding purposes it will, if anything, surpass Mme. Crozy—at least, if not surpass it, it certainly will meet with equal favor. As a pot plant for greenhouse cultivation, it is not so desirable on account of its taller growth, but for bedding purposes in many ways it will be superior. It is entirely distinct, and as the color is absolutely different, one will not conflict with the other in any way.

CAPTAIN P. DE SUZZONI.—We have tested all the yellow varieties of Cannas that have been introduced so far up to this time, and can say without hesitation this variety is the best yellow Canna introduced so far. It is almost as large a flower, with about as broad a petal, as Mme. Crozy, with a very large spike of bloom, and is slightly mottled with scarlet. The scarlet markings are such, however, that instead of detracting, as is usual with most of the yellow Cannas that have been so marked heretofore, it intensifies, if anything, the brilliancy of the yellow. There is a great demand for yellow Cannas on account of the desirability of the color and this is bound to have a heavy run in consequence. It has a distinct habit of growth, the foliage very nearly approaching the banana.

PAUL MARQUANT.—This variety is not much known, but it is one of the most distinct of all the varieties, and one of the most beautiful. Many who have seen it in our houses have considered it preferable to any other variety, not excepting Mme. Crozy. The individual flowers are larger than any other, and the flower spike very large, each flower standing out separately by itself. The flower is as fine as the finest orchid. The color is very hard to describe, to give any adequate idea of how beautiful a shade it is. It might be described as a bright salmon, with a carmine tint. The flower has a silvery lustre, which glistens and lightens it up with a silvery sheen, making the salmon of the flower very brilliant. Some have described it as apricot—a shade that is so fashionable at the present time. For greenhouse culture it is one of the finest of all, as the growth is not as tall as the two preceding sorts.

MISS SARAH HILL.—This variety somewhat approaches Alphonse Bouvier in color, but is entirely different in every way. The flower spike is held erect and upright; the crimson has considerable carmine in it, and so it may be called a carmine-crimson. It is entirely different from Alphonse Bouvier in the style of the flower spike, and in the habit of growth; the flower spike is held erect, and while the head is not so large as Bouvier, it is of more dwarf growth, and holds its head of bloom a trifle longer than Bouvier. Its main merit lies in the fact of its being more dwarf, so that it can be used where it would not be practicable to use Alphonse Bouvier.

PRICE, $6 00 PER DOZEN; $40.00 PER 100. PRICE FOR LARGER QUANTITIES ON APPLICATION.

SEE OUR ADVERTISEMENT OF NEW CANNAS IN LAST ISSUE—"MME. CROZY" AND "STAR OF '91," ETC.

F. R. PIERSON COMPANY,

TARRYTOWN-ON-HUDSON, N. Y.

Cincinnati.

On Saturday night, March 11, our Florists' Society held its 53d monthly meeting. This was called a carnation meeting and as all the boys are very much interested in the "rust" we had a good attendance. There were several who entered quite largely into the discussion, and I have withheld this report awaiting their papers, but so far none have responded except our ex-president, Geo. Corbett. Mr. C. states that in the fall and early winter he noticed fungus on Silver Spray and on some new varieties that came from the shippers. We commenced using Bordeaux mixture in the dry and liquid form, also sulphur on the pipes, and by this means not only kept down the fungus but our plants have grown vigorously and been very productive. We do not think fungus will become a general "pest." With us it yields readily to treatment. Our old varieties show no signs of disease. New varieties seem weakened by over-propagation. We do not wet the foliage much in dark weather, as we prefer to have the plant dry before night, same as with the rose. Free use of sulphur on the pipes keeps down red spider. From this time on we syringe early in the morning on bright days. We surface dress with fine bone meal and cover same with well rotted manure. Night temperature about 50°. Our carnation houses face south and plants receive plenty of light. We have no doubt that fungus will prove very troublesome in old, leaky houses, with insufficient light. We are now using "Fostite" in preference to Bordeaux mixture, it is so much easier to handle. We intend to use same on the field this summer as a preventive.

At this meeting we had the honor of a visit from Mr. N. Ohmer, of Dayton, O., Chief of Horticulture and Agriculture for Ohio, at the great Columbian exhibition. Mr. Ohmer stated that decorative plants were needed very badly and urged upon the florists to contribute as much as possible. A committee was appointed to look after this matter.

It was also decided that we should hold another chrysanthemum show this fall, and a committee was appointed to prepare a preliminary premium list.

Trade in general during Lent has been very dull, but is now picking up. The Huntsman Floral Co. have several large weddings for the coming week, and the rest of our florists report business looking up. The Easter trade will no doubt be good, as prices will advance very little, if any, and stock promises to be plentiful, especially Harrisii and candidum lilies, orchids, callas and all forcing stocks.

There will be a special meeting of this society on March 25, to take final action regarding the chrysanthemum show this fall, an account of which will follow later.

E. G. GILLETT, Sec'y.

ADVS. for our special rose number must reach us by the 27th at the very latest.

BY THE THOUSAND.

Araucaria excelsa, Aspidistra, Palms, Phormiums, Laurel, Bays, Crowns and Pyramids of all sizes.

Packing free for Cash with order.

THE NURSERIES. JULES DE COCK.

LEDEBERG, near Ghent, BELGIUM.

A Specialty Bulb Begonias, extra vars. at $3 per 100.

Mention American Florist.

PANSIES. Strong, healthy plants from cold frames, $2.00 per 100.

G. NOACK, Batavia, N. Y.

The three leading Florist Flowers:

CHRYSANTHEMUMS, CARNATIONS AND ROSES.

ALL THE NEW AND SELECTED STANDARD VARIETIES. . . .

My stock of all are as fine as can be produced at reasonable rates. Complete list of these will be mailed to all applicants in the trade.

JOHN N. MAY, Summit, N. J.

Mention American Florist.

CYCAS REVOLUTA.

The largest and BEST selected stock of Cycas Revoluta (fronds and roots cut off, TRUE, long leaved variety) now on hand. CYCAS CIRCINALIS delivered from April 1st.

Lilium Auratum, Lilium Spec. Album, Lilium Spec. Rubrum, Nerine Japonica, Lilium Krameri, etc., in great quantities, imported for spring trade.

Price on application.

F. GONZALEZ & CO.,

303-312 WAYNE STREET, CRESCENT AVE.

SAN FRANCISCO, CAL.

N. B. Fresh Cycas leaves for sale by the thousand.

ROZY CANNAS.

WE ARE HEADQUARTERS . . for all the Novelties, and in addition control *EXCLUSIVELY* several grand varieties which we now offer for the *first time*. We will not be undersold on any of the list.

J. C. VAUGHAN,

New York: CHICAGO.

26 Barclay Street. P. O. Box 6BB.

Greenhouses: Western Springs. . . .

Association "Flora"

BOSKOOP, HOLLAND.

Now on hand in New York:

CLEMATIS, 3 Years, per 100, $30.00

H. P. ROSES, for forcing, " 9.00

In the best variety, as Alfred Colomb, Anna de Diesbach, B. Rothschild, Fisher Holmes, Gen. Jack, La France, Mme. G. Luizet, Mme. Plantier, Magna Charta, Paul Neyron, P. C. de Rohan, Merville de Lyon, Perle des Blanches, Ulrich Brunner and other sorts. Azaleas, Rhododendrons, Spiræas, etc. We also have Palms, Dracænas, Araucarias and Bay Trees at our nurseries in Holland. Catalogue on application.

P. OUWERKERK, 206 Cambridge Ave., JERSEY CITY, N. J.

Mention American Florist.

MAGNOLIAS

OBOVATA GRACILIS AND PURPUREA.

Fine, bushy plants, 3 to 8 feet, from $25.00 to $200.00 per 100.

Send for descriptive catalogue and wholesale price list free to all in the trade.

SAMUEL C. MOON,

MORRISVILLE, Bucks Co., PA.

Always mention the American Florist when writing to advertisers.

CHRYSANTHEMUMS

We Offer for a Short Time the Following Standard Sorts. The Plants are in the Pink of Condition.

					Per 100
W. H. Lincoln,	stock plants,	4-in pots.			$15.00
H. E. Widener,	"	"	"	"	25.00
Ivory,	"	"	"	"	25 00
Dominalion,	"	"	"	"	15.00
Mrs. Geo. Bullock,	"	"	"	"	15.00
L. Canning,	"	"	"	"	15.00
W. H. Lincoln,	"	"	2-in.	"	3.00
H. E. Widener,	"	"	"	"	5.00
Ivory,	"	"	"	"	4.00
Dominalion,	"	"	"	"	3.00
Mrs. Geo. Bullock,	"	"	"	"	3.00
L. Canning,	"	"	"	"	3 00
Poller Palmer,	"	"	"	"	5.00
Ruth Cleveland,	"	"	"	"	5.00
Mrs. E. D. Adams,	"	"	"	"	6.00
Minnie Wanamaker	"	"	"	"	5.00
Mrs Irving Clark,	"	"	"	"	3.00
Louis Boehmer,	"	"	"	"	3.00
Mrs B Harrison,	"	"	"	"	3.00
Kiolo.	"	"	"	"	3.00

Rooted Cuttings ready Feb'y 25th of the following Varieties:

Mrs. Geo. Bullock, L Canning, Kiolo, Dominalion, Mrs. B Harrison, Louis Boehmer, at.....$1.50 per 100

H. E. Widener, Ivory.....$2.50 per 100

25 at 100 rate. Packing free.

JOHN IRVINE CO.,

Bay City, Mich.

P. S. Adiantum Capillus Veneris, 2-inch, a fine lot now ready for shipment at $5 per 100. Nephrolepis Exaltata, 3-inch, $7 per 100.

CLEMATIS.

	Doz.	Hundred
2 Year Choice Assortment.....	$3.00	$25.00
1 " " "	2.00	15.00
H. P. Roses, Choice named kinds....	1.50	10.00
Monthly " " " "	1.25	8.00
Daisy Snowflake, strong plants.....	.50	3.00
Dahlias, field grown, choice named..	1.25	8.00

F. A. BALLER,

BLOOMINGTON, ILL.

CHEAP NAMED DWARF FRENCH CANNAS.

There is a demand for cheap Canna stock, something that can be sold low and that is good. Having large stocks of the more valuable and higher priced novelties in Cannas we offer the following sorts at these exceptionally low rates. Many of the varieties are worth much more than the price we charge for them and are the best of Crozy's French Cannas of the last three or four year's introduction: potted up and in bloom will meet with a ready sale and be found very profitable; will pay you to discard old stocks and substitute these. Antonin Crozy, Antoine Chantin, Admiral Courbet, Childsii, Enfant Du Rhone, Goury, Isaac Casati, Jules Chretien, Kaiser William II, Louise Chretien, Mme. Antoinette Allamagny, Mme. Oriol, Prof. David, Petite Jeanne, Princess De Lasignan, Souv. De Jeanne Charreton, Statuaire Fulconis.

Price $7.00 per hundred; $60.00 per thousand.

F. R. PIERSON COMPANY, TARRYTOWN-ON-HUDSON, N. Y.

Spring Sales

in bedding stock are sure to be large and profitable this year. **Are you prepared?** If not, **we are,** to furnish you with

Rooted Coleus,

in all the best varieties, the quality of which is well known. Our stock this year is better than ever, and includes the coming yellow of yellows, ***"Sunrise."***

By the way it is not too late to buy **Carnations.** We have the best. List for the asking.

ALEX. McBRIDE,

. . . . ALPLAUS, N. Y.

ROOTED CUTTINGS.

Alternanthera, Versicolor, Tricolor and Aurea Nana	per 100	.50
Alternantheras Paronychioides	"	.75
Coleus, best old and new	"	$1.00
Fuchsia, leading varieties	"	1.50
Heliotrope, leading varieties	"	1.50
Mexican Primrose	"	1.50
Parlor Ivy, variegned	"	1.50

PLANTS.

Anthericum Picturatum	per doz.	$1.00
Fuchsia, Trailing Queen	"	.75
Begonia assorted	per 100	4.00
Coleus, assorted	"	3.00
Chrysanthemums, leading kinds, our selection	"	3.00
Heliotrope, assorted	"	3.00
Petunias, double, assorted	"	4.00
Anthemus Tinctoria, a good bloomer	"	4.00
Anthemus Coronaria	"	4.00
Solanum Jasminoides Grandiflora	"	4.00
" Jasminoides var	"	5.00
Var. Parlor Ivy	"	4.00
Fuchsia, best varieties	"	3.00
" Storm King and Phenomenal	"	4.00
Echeveria Glauca	"	4.00
" Extensa Globosa, for centers, plants six inches across	each.	.25

Price List on Application.

ROBT. S. BROWN & SONS,

Box 99, Kansas City, Mo.

SPLENDID STOCK.

		Per 100
Alternantheras P. Major, aurea nana	2-in. pots,	$2.00
Begonias, flowering sorts	2½-in. "	4.00
Coleus, in 12 splendid sorts	2-in. "	2.50
Cyclamen, in bud or bloom	3½-in. "	8.00
Chrysanthemums, 40 splendid sorts	2-in. "	3.00
Dahlias, large roots, 30 varieties	"	5.00
Geraniums, double and single sorts	2½-in. "	4.00
" silver leaved sorts	2½-in. "	4.00
" ivy leaved sorts, including Jeanne d'Arc	2½-in. "	4.00

HANS NIELSON, St. Joseph, Mo.

HEADQUARTERS FOR WATER-LILIES

SEED TUBERS AND PLANTS.

Place your orders early if you wish to secure good stock of charming yellow Water Lily, N. Chromatella plants, 1st size, $1.00 each, $10 doz.; 2d size, 75c each, $8.00 per doz. Also, the new French and other new hardy varieties. Send for price list.

Wm. Tricker, DONGAN HILLS, NEW YORK.

Double White Primrose produces large quantities of firm white flowers, (valuable for all kinds of cut flower work), every florist should have it; 2, 3, 4, 5-in. pots @ $8, $10, $12 and $15 per 100 plants in full bloom.

Large assortment of the best Roses, Carnations, Chrysanthemums, M. H. Fern, Coleus, Violets, Geraniums, etc., for florists use. Send for trade price list to

HENRY SMITH,
130 Monroe St, — Grand Rapids, Mich.

100,000 VERBENAS.

THE CHOICEST VARIETIES IN CULTIVATION.

Fine pot plants $2.50 per 100; $20 00 per 1000 Rooted Cuttings, $1 00 per 100; $8 00 per 1000.

NO RUST OR MILDEW.

Packed light, and satisfaction guaranteed. Send for circular. . . .

Our sales reached nearly 250,000 last year, and we can assure our customers that our plants are fully equal, and assortment of varieties surpass those of last year.

J. L. DILLON, Bloomsburg, Pa.

ROSES AND CARNATIONS.

The Largest and Finest Stock in the Northwest ever offered at the following prices:

ROSES—Perles, Hoste, Sunset, La France, Mermet, Bride, C. Soupert, Niphetos, from 2½-inch pots.	$4.00 per 100
Mme. Watteville, Albany, Pierre Guillot, Meteor, from 2½-inch pots	5.00 per 100
American Beauty, from 2½-inch pots	7.00 per 100
CARNATIONS—Silver Spray, Lizzie McGownn, Hinze's White, Hector, Portia, Garfield, Grace Wilder, Fred. Creighton, Mrs. E. G. Hill, from 2-inch pots	3.00 per 100
Rooted Cuttings of all varieties offered	2.00 per 100

Cut Flowers, Roses, Carnations Lilium Harrisii and Smilax at lowest market prices. Telegraph orders promptly attended to. CHRIST HANSEN, Wholesale Florist, ST. PAUL, MINN.

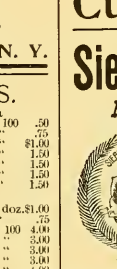
Rooted Cuttings

of Evergreens, Hardy Flowering Shrubs and Hardy Perennials (Achillea, iberis, etc.) raised on contract for spring delivery. SEND LIST OF WANTS.

. . . *ISAAC C. ROGERS, MOORESTOWN, N. J.*

Siebrecht & Wadley,

ROSE HILL NURSERIES,



NEW ROCHELLE, N. Y.

Palms, ORCHIDS, Roses, and New Plants.

FRESH DRACAENA CANES NOW READY.

ORCHIDS.

The Finest Stock in the World.

SANDER'S, ST. ALBANS, ENGLAND.

Thirty minutes from London.

Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City.

No Trees of 1st quality can ever be sent by mail. Mayhap you know it. By freight, prepaid if preferred, we ship safely 4, 5, or 6 ft. trees; 2-yr. Roses of rare excellence—everything! You actually pay less than for the puny stuff. 1,000 acres Nurseries. 20,000 acres Orchards. Exact information about trees and fruits. Stark Bros., Louisiana, Mo.

CANNAS

CHRYSANTHEMUMS.

Lowest Prices for Choice Stock. List Free.

T. H. SPAULDING, Orange, N. J.

TRY **DREER'S GARDEN SEEDS,** Plants, Bulbs & Requisites. They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.

HENRY A. DREER, Philadelphia, Pa.

"CHRYS-COLA"

ROOTED CUTTINGS COLEUS.

Ten best varieties, 75c. per 100; $6 00 per 1,000.

CHRYSANTHEMUMS. L. Boehmer, Jessica, L. Canning, Excellent, Puritan, Gloriosum, Kioto, G. P. Rawson, Mrs. Fottler, 25c. per dozen, $1.75 per 100. Mrs. E. D. Adams, Harry May, Roslyn, W. A. Manda, 60c. per dozen, $4.00 per 100.

FUCHSIAS. Black Prince, C. Blanc, W. E. Wait, Novean Mastadonte, Minnesota, 18c. per dozen, $1.00 per 100.

S. B. FIELD, Roselle, N. J.

CUTS!

Wood Engraving, Zinc Etching, Half-Tone, Wax Engraving, Photo-Engraving, Designing.

MANZ & CO.,

183 Monroe Street, CHICAGO. ENGRAVERS.

FOR SALE.

10,000

Rooted Cuttings of Alternanthera

P. major and A. nana, 90c. per 100; $7.00 per 1000. Fine stock.

C. K. HOFFMEYER, Mansfield Valley, Pa.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

Toronto.

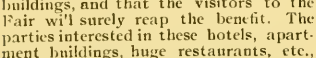
In spite of it being Lent business has been fairly good, and I hear very little grumbling among florists. Some fine Harrisii lilies are coming in, and bloom of all kinds in season is plentiful.

Reports continue to find their way here through the press and otherwise of the exorbitant prices that are going to be charged for everything in Chicago this coming summer, and I think it would be to the interest of the inhabitants of that city if they would take some pains to deny some of these reports (which will no doubt find their way all over the world) unless they really do intend "to kill the goose that lays the golden egg." One hears this subject talked about in the clubs, in the cars and on the street, and everyone seems to be of the same opinion, viz: That it will be an utter impossibility for the *multitude* to see the World's Fair. I have heard lager beer quoted at 25c. a glass, light lunches at $1, hotel expenses way up out of sight. If only millionaires are wanted this is all right, but I think the multitude would pay Chicago better.

[In Chicago the source of wonder is as to where the people are to come from to fill the huge caravanseries that are being erected solely for the accommodation of World's Fair visitors. Conservative people consider that the mad competition in this line will result in serious loss instead of gain to the projectors of these huge buildings, and that the visitors to the Fair will surely reap the benefit. The parties interested in these hotels, apartment buildings, huge restaurants, etc., may intend to ask exorbitant rates, but unless the people come in such vast droves as none but they anticipate the competition for a share of the patronage will be so great as to preclude the possibility of unreasonable charges. In fact conservative owners are already prepared to contract with visitors for the entire summer at very reasonable rates. And scarcely a day passes but some new scheme for feeding the multitude is projected. ED.]

If the weather is sufficiently mild the plants for the World's Fair from Ontario will be collected next week and shipped the following week; special attention will be paid to the packing of these plants, and every care will be taken so that they may arrive in good condition. Most of the exhibits in other departments have already started or will do so this week. The plants will fill three cars. E.

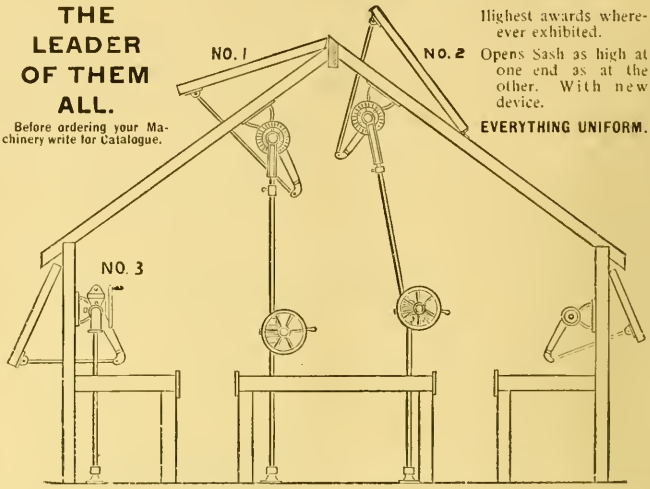
PLANT BED CLOTH.
CHEAP SUBSTITUTE FOR GLASS on Hot-beds, Cold Frames, etc. Three grades.
Light, Medium, Heavy.



Used by Florists, Gardeners, etc., invaluable for Tobacco Growers. Protects from frost. Promotes, hardy, vigorous growth and keeps beds warm; will not shrink or mildew. For sale by the leading Dry Goods houses, Seedsmen, Florists, etc. Well known and extensively used. For circulars and samples apply
NATIONAL WATERPROOF FIBRE CO.,
50 South Street, - - NEW YORK.
Agents Wanted.

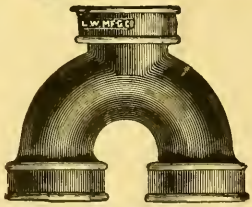
Ice Boxes
FOR FLORISTS.
All sizes and styles. Correspondence solicited.
KANKAKEE MFG. CO., Kankakee, Ill.
CHICAGO OFFICE: 266-268 Wabash Ave.
Mention American Florist

STANDARD VENTILATING MACHINERY,
THE LEADER OF THEM ALL.
Before ordering your Machinery write for Catalogue.



Highest awards wherever exhibited.
Opens Sash as high at one end as at the other. With new device.
EVERYTHING UNIFORM.
E. HIPPARD, YOUNGSTOWN, OHIO.
Mention American Florist.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.
Pipe can be easily put together by any one, very little instruction being needed.
GET THE BEST!
Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.
Mention American Florist.
L. WOLFF MFG. CO., 93 to 117 W. Lake Street, CHICAGO.
WRITE FOR ILLUSTRATED CIRCULAR.

Pat. 1882, '85, '86, '88, '90, '91.
FOR WATER, AIR, STEAM, ACIDS, OILS, LIQUORS, GAS, SUCTION,
And for any and every purpose for which a hose can be applied.
Sizes, ¼-inch to 42 inches diameter.
The making, vending or use of any Serviceable Armored Wire Bound Hose not of our manufacture is an infringement on one or more of our Patents. The rights secured to us render each individual dealer or user responsible for such unlawful use with all the consequences thereof. For prices and discounts address WATERBURY RUBBER CO., Sole Mf'rs and Owners of all the *Sphincter Grip Armored Hose Patents*, 49 Warren Street, New York.
J. C. VAUGHAN, Agent, CHICAGO.

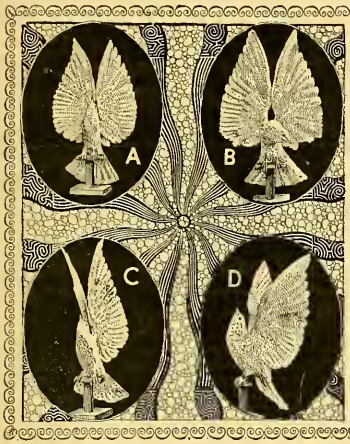
ESTABLISHED 1866.
FLORISTS WIRE DESIGNS
MANUFACTURED BY
N. STEFFENS
335 EAST 21ST ST. NEW YORK.

WHEN writing our advertisers please use one of your printed business letter heads or enclose your business card.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

Doves. ❋ Doves.



I have Doves.

I have lots of Doves.

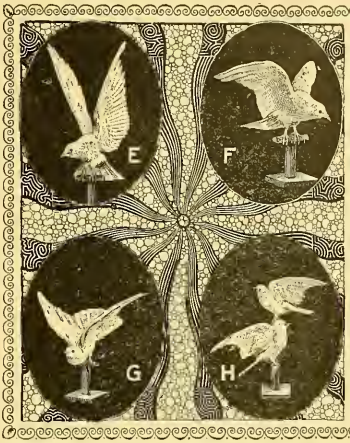
I have lots of good Doves.

—:o:—

First Quality.....$14 00 a doz.
Second Quality..... 12.00 "
Extra Selected..... 15 00 "
10 per cent. off on orders of two dozen or more.

—:o:—

S. J. RUSSELL,
103 Van Winkle Street,
JERSEY CITY, N. J.



FOR SALE BY F. E. McAllister, New York; Ed. Jansen, New York; A. Herrmann, New York; N. Steffens, New York; Reed & Keller, New York; W. C. Krick, Brooklyn, N. Y.; H. Bayersdorfer & Co., Philadelphia, Pa.; Ernst Kauffman, Philadelphia, Pa.; C. Ribsam & Sons, Trenton, N. J.; J. M. McCullough's Sons, Cincinnati, Ohio; B. P. Critchell & Co., Cincinnati, Ohio; J. C. Vaughan, Chicago, Ill.; Wisconsin Flower Exchange, Milwaukeee, Wis; Currie Bros., Milwaukee, Wis.; C. A. Kuehn, St. Louis, Mo.; S. Mount & Co., St. Louis, Mo.; C. Young & Sons Co., St. Louis, Mo.; Jordan Floral Co., St. Louis, Mo.; C. Strauss & Co., Washington, D. C.; Ed. S. Schmid, Washington, D. C.; G. W. Currey & Co., Nashville, Tenn.; Eckhardt & Co., Nashville, Tenn.; T. W. Wood & Sons, Richmond, Va.; U. J. Virgin, New Orleans, La.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

Clear Cypress, from bottom gutter up is my specialty.

Lyman Felheim,
ERIE, PA.

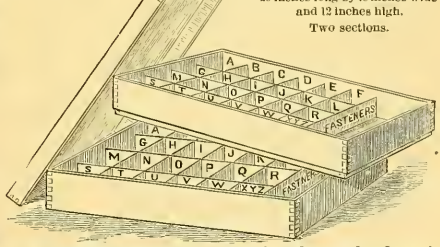
J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS •
Greenhouse Material,

LOUISVILLE, KY.

SEND FOR A COPY
—OF OUR—
TRADE DIRECTORY
AMERICAN FLORIST CO., CHICAGO.



Dimensions of this Box:
26 inches long by 18 inches wide and 12 inches high.
Two sections.

With an order for 500 letters, we furnish a box made of wood, nicely stained and varnished, such as is represented in the cut.

BOSTON FLORIST LETTER CO.

Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1½-in. and 2-in. 2.00 per 100. Patent fastener with each letter.

OUR NEW SCRIPT LETTER, $4.00 per 100.

N. F. McCARTHY, Treas. & Mangr. | Address 13 Green St., **Boston, Mass.**

Address all correspondence to 1 Music Hall Place.

We have a new FASTENER which we consider a decided success. Any customers having old style fasteners which they wish to exchange, can do so without additional cost by writing us.

AGENTS:

Marschuetz & Co., 25 N. 4th St., Phila., Pa.
A. Kolker & Sons, New York.
F. E. McAllister, 22 Dey St., New York.
A. D. Perry & Co., 33 Warren St, Syracuse, New York.
E. Kauffman, Philadelphia, Pa.
H. Bayersdorfer & Co., Philadelphia, Pa.
A. C. Kendal, 115 Ontario St, Cleveland, O.
J. A. Simmers, Toronto, Ont. Agent for Canada.
E. H. Hunt, 79 Lake St., Chicago, Ill.
Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.
H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O
T. W. Wood & Sons, 6th and Marshall Sts. Richmond, Va.
Jas. Vick's Sons, Rochester, N. Y.
C. A. Kuehn, 1122 Pine St., St. Louis, Mo.
D. B. Long, Buffalo, New York.

These Letters are handled by all the Wholesalers in Boston.

GOODYEAR RUBBER CO.

ALL KINDS RUBBER GOODS.

We make a **SPECIALTY** in **GARDEN HOSE,** in both Rubber and Cotton.

A GREAT VARIETY OF HOSE REELS, SPRAY PIPES, SPRINKLERS, ETC.

141 Lake Street, CHICAGO.

Easter Decorations

will be enhanced vastly by using **GREEN SILKALENE** for stringing.

Send for Samples and prices.

JOHN C. MEYER & CO.,
289 Devonshire St., BOSTON, MASS.

CATALOGUE PRINTING. ELECTROTYPING.

Done with expert ability for Florists, Nurserymen, Seedsmen. Write to

J. Horace McFarland Co.,
HARRISBURG, PA.

Recent Legal Decisions.

Promptness Necessary to Rescind a Purchase for Fraud or Mistake.

Where a party desires to rescind a contract of purchase upon the ground of mistake or fraud, he must, upon the discovery of the facts, at once announce his purpose, and adhere to it. If he be silent, and continue to treat the property as his own, he will be held to have waived the objection, and will be conclusively bound by the contract, as if the mistake or fraud had not occurred. He is not permitted to play fast and loose. Delay and vacillation are fatal to the right which had before subsisted. These remarks are peculiarly applicable to speculative property which is liable to large and constant fluctuations in value.

Rugan v. Sabin. U. S. Circuit Court of Appeals, 8th Cit. 53 Fed. Rep. 415.

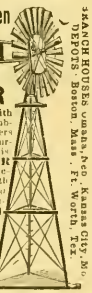
IN A LECTURE on "Agricultural education and its place in the University curriculum" read before the Agricultural Association of Cornell University January 31, last, Prof. L. H. Bailey calls attention to the fact that there is no school in North America to which the florist can turn for professional instruction, and asks: "Shall Cornell first enter the field?" He adds: "For the equipment of a working plant in pomology, floriculture and kindred horticultural pursuits, at least $50,000 is needed at once."

OUR special rose number will be issued March 30. It will be an advance on all our former special numbers and will go to every live florist in America. Send in your advertisements now. No increase in rates.

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

FOR Florists, Nurserymen & Seedsmen

GEM STEEL GEM WIND ENGINE AND GEM STEEL TOWER



The GEM ENGINE, when furnished with Graphite Bearings, requires no oiling, no climbing of towers, no hinged or frail-jointed towers and practically no attention, yet is more durable than other Wind Motors that require all this and more unique in finish. The GEM TOWER combines beauty, strength, durability, simplicity to the greatest extent and has no equal. Both are manufactured and guaranteed by the oldest and most reliable Wind Mill Company in existence, and who build the Halladay Standard Pumping and Geared Wind Mills, the Standard Vaneless and U. S. Solid Wheel Wind Mills, Pumps, Tanks, Horse Hay Tools, &c. No other company offers equal inducements. Send for Catalogue and Prices.

U. S. WIND ENGINE & PUMP CO.

BATAVIA, ILL., U. S. A.

BRANCH HOUSES: Omaha, Neb. Kansas City, Mo. Dallas, Tex. Fort Worth, Tex. Boston, Mass.

Mention American Florist.

THE BEST POTS.
THE CHEAPEST.
THE LOWEST FREIGHT RATES.
THE BEST OF PACKING.
THE LARGEST POTTERY IN THE STATE FOR MAKING STANDARD FLOWER POTS.

PRICE LIST OF POTS.

	Per 100		Per 100
2 inch	$ 3.25	6 inch	$ 2.20
2½ "	3.50	7 "	3.50
2¾ "	4.00	8 "	5.00
3 "	5.00	9 "	7.50
3½ "	7.25	10 "	10.00
4 "	9.00	11 "	15.00
6 "	13.80	12 "	20.00

Terms: Cash, free on board cars here. Address

HILFINGER BROS., Potters
FORT EDWARD, N. Y.

THE GREAT ANTIPEST.
For particulars, see next week.
R. W. CARMAN, GEN'L AGT.,
291 Amity Street, FLUSHING, Queens Co., N. Y.

"Standard" Flower Pots.

As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address

The Whilldin Pottery Company,

BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.

Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.

A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.

We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.

SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY,
Manufacturing the
ELVERSON, SHERWOOD & BARKER
STANDARD FLOWER POTS.
Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bud Pots, etc.
ADDRESS: PITTSBURGH CLAY MF'G CO., New Brighton, Pa.

H. M. HOOKER COMPANY,
57 and 59 W. Randolph Street, CHICAGO,
NATURAL GAS MADE GLASS
FOR GREENHOUSES.
Write for latest prices.

GARDENERS HOT-BED SASH.
INDESTRUCTIBLE.
CYPRESS GREENHOUSE WOOD WORK OF ALL KINDS.
Write for prices.
THE PEIRCE & COLEMAN CO.,
Dayton, Ohio.
J. C. VAUGHAN, Agent for Chicago and New York.

U. S. AND FOREIGN PATENTS Trade Marks, Designs, Opinions, Searches, &c., promptly attended to. Send sketch or model for free examination as to patentability. All work strictly confidential.
GEO. H. CHANDLEE,
Atlantic Building, WASHINGTON D.
Mention American Florist

W & C.Co. LIMITED

Wrought Iron Pipe, Fittings, Valves, ETC.
78 JOHN ST., NEW YORK.
WELLS & COUTAN CO., L'td.
Mention American Florist.

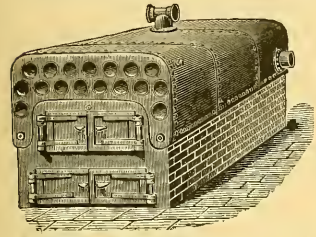
Please mention the American Florist every time you write any of the advertisers on this page.

ESTABLISHED 1854.

DEVINE'S BOILER WORKS.

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers



Capacity from 350 to 10,000 feet of four-inch pipe. SEND FOR NEW LIST.

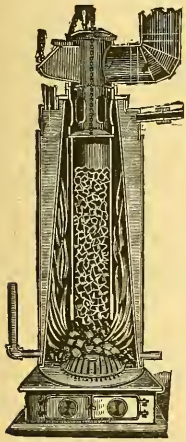
FRANK DAN BLISH, Att'y,

OFFICE, 189 STATE STREET.

WORKS, 56th & WALLACE STREETS.

CHICAGO.

Mention American Florist.



THE WILKS HEATER,

FOR HEATING

GREENHOUSES, STORES, DWELLINGS, ETC.

Manufactured by *THE S. WILKS MF'G CO.* 123 S. Clinton St., CHICAGO, ILL.

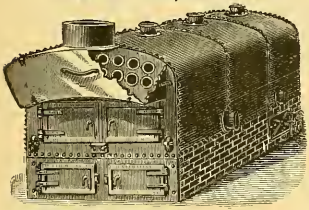
SEND FOR CATALOGUE.

KROESCHELL BROS.

IMPROVED

Greenhouse Boiler,

41 to 55 Erie St., CHICAGO.



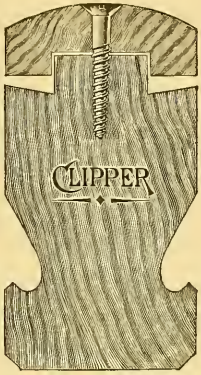
Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around (front, sides and back). Write for information.

Mention American Florist.

FLORAL DESIGNS

The Cut Flower Worker's friend. Fine book of 160 pages. Send $3.50 for it, to

J. HORACE McFARLAND, Harrisburg, Pa.



Mention American Florist.

THE "LOCKLAND" Sash Bars

ARE ALWAYS SATISFACTORY.

This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.

GUTTER MATERIAL, RIDGES, SASH, ETC.

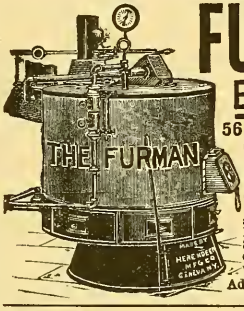
The finest CLEAR CYPRESS used.

Write for circulars and estimates.

LOCKLAND LUMBER CO.

Lockland, O.

Mention American Florist.



FURMAN BOILERS

Economical — Substantial — Safe.

56 STYLES AND SIZES—BURNS HARD OR SOFT COAL.

Modern Hot-Water Heating

These Boilers have a high reputation for Staunchness, Durability and Safety, and are GREAT COAL SAVERS. Minimum Friction and Maximum Velocity only obtained by VERTICAL WATER CIRCULATION. Send for new 150-page book giving full particulars and a great deal of valuable information on modern Heating and Ventilation with plans and tables for correct hot-water work. Mailed free.

Address HERENDEEN MFG. CO., 26 Vine Street, GENEVA, N. Y.

RIDER

Do You Want A RELIABLE SUPPLY OF **WATER**

For Your GREEN HOUSE, ROSE HOUSE, NURSERY,

Conservatory, Lawn, House, Garden, Stock or any other purpose,

WITHOUT EXPENSE OF TIME OR LABOR?

All of this can be accomplished by using the Improved

RIDER OR ERICSSON **HOT-AIR PUMPING ENGINE**

ERICSSON

Catalogue with full partic lars, sent on application.

DE LAMATER IRON WORKS, 21 CORTLANDT ST., NEW YORK, N. Y.

D. H. ROBERTS,

159 & 161 S. Fifth Ave., NEW YORK,

NATURAL GAS MADE GLASS

for ROSE HOUSES, CONSERVATORIES, Etc., Etc.

Our Glass received the Highest Award at the Boston Convention of the S. A. F

FIRST-CLASS CERTIFICATE OF MERIT.

PERFECT DRAINAGE **BENCH TILE** • Used by all the leading Growers and Horticultural Builders.

For testimonials, circulars, etc., address **W. P. WIGHT,**

UPLAND GREENHOUSES, : : : MADISON, NEW JERSEY

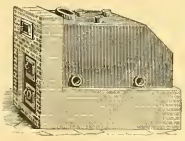
YOU CAN SAVE MONEY BY PURCHASING, AND GLASS BY USING *HAMILTON'S PATENT SASH LIFTER.*

"It works like a charm." So say those who use it. Send us 50 cents for one sample and you will say so too.

BAY STATE HARDWARE CO.,

272 Freeport Street, BOSTON, MASS.

Mention American Florist.



GREEN-HOUSE HEATING.

MYERS & CO.

1518 & 1520 S. 9th St., PHILADELPHIA.

Send for catalogue and price list.

Ment'on American Florist.

Index to Advertisers.

Adv Rates, etc.....850
Anchorage Rose Co ...846
Asmus Ernst.....848
Baird Chas A. 856
Baller F A 858
Barnard W W & Co...850
Baumann Otto 846
Bay State Hdw Co....863
Bayersdorfer H & Co .850
Baylis Henry W 853
Berger H H & Co. 853
Bonsall Jos E & Son...851
Boston Letter Co. 861
Brague L B. 850
Brauer & Richter 856
Brinton W P. 855
Brotherton W A & Co..854
Brown R S & Son 859
Buist Robert 853
Burns & Raynor.....851
Burrow J G 856
Burton John.. 847 854
Carman R W..... .. 862
Carmody J D 861
Chandler Geo F 862
Chitty H E.....855
Connelly John J 856
Cook John.....852
Cortney T J & Co...848 861
Cosman Bros ... 852 856
De Cock Jules 858
Dayton's Boiler Wks..853
De Lamater Iron Wks.863
De Witt Thomas.. ... 855
Dillon J L..... .. 850
Breer H A 862
Elliott J Wilkinson .. 854
Elliott W H 850
Ellison Wm.... 850
Engle W J 854
Euclid Ave Greenho's 855
Faust H G & Co 853
Felheim Lyman.....861
Field S R.....862
Frost James 856
Gardiner J & Co.. ... 854
Gear Fred. 854
Gibson J C.....852
Gonzalez & Co 858
Goodyear Rubber Co .861
Hall Ass'n.....854
Hammond Benj.....856
Hancock Geo 855
Hansen Christ 850
Hart James.....854
Hart Michael A 861
Hartford H E 856
Heinl Jos.....856
Heise J B 846
Hennerson John Co .. 847
Herendeen Mfg Co .. 863
Herr Albert M.....854
Hews A H & Co.....862
Hillinger Bros.....862
Hill E G & Co. 854
Hippard E 846 860
Hitchings & Co.....864
Hoffmeyer C K 859
Hooker H M Co.....862
Horan Edw C 861
Horan James. 855
Hostetter E P 854
Hulsebosch Bros.....855
Hunt E H.....846 860
Hunt M A.....847
Hunter & Purdy 851
Irvine John Co.....856
Jordan Floral Co 846
Kankakee Mfg Co 860
Kantzmann Ernst & Co.850
Kennicott Bros.....861
Koffman E 850
Kroeschell Bros.....863
Knehn C A.....850
Larkin Isaac.....854
La Roche & Stahl..847 850
Little W S & Co 852
Lockland Lumber Co..863
Lombard R T.....855
Long Dan't B.....850
McBride Alex.....859
McCarthy N F & Co..861
McFarland J H.....863
McFarland J H Co.....861
McGowan John.....855
Manz J & Co.....859
Marschuetz & Co.....850
May John N 858
Meech F A & Son 855
Mendenhall R J 852
Meyer John C & Co 861
Michel Plant & Bulb Co 853
Milling Bros.....851
Moffatt G J.....853
Moninger Jno C.....864
Moore Samuel C.....858
Moore Frank L. 848
Myers & Co..... ... 863
Nanz C G 850
Nanz & Zeuner. . 846 847
National Fibre Co 860
Nelson Hans 859
Niles Centre Floral Co 851
Nowck G.....858
Oelrich Anton 854
Olson M 851
Ouwerkerk P.....858
Parsons & Sons Co. ..858
Peck & Sutherland.....851
Pelree & Coleman Co 862
Pennock C J 855
Pennock Sam'l S.....850
Pierson F R Co.852 857 859
Pillsbury I L 854
Pittsburg Clay Mfg Co.862
Powell W S & Co.....852
Prince A F & Co 851
Randall A L.....851
Renard Joseph 855
Rimbaud Benj.....853
Roberts D H.....863
Roehrs Theo.....851
Rogers Nurseries.....849
Rolker A & Sons 850
Russell Governor 855
Russell S J.....861
Salter Bros. 847
Sander & Co 858
Schulz Jacob.....846
Scott Alex 856
Sheridre W R 855
Sheridan W E.....851
Siebrecht & Wadley....859
Siffle Dopfel & Co.....862
Situations, wants. 846
Smith C A Floral Co...846
Smith Henry 850
Spaulding T H.....859
Spooner Wm H.....847
Stark Bros 846 850
Steffens N 850
Storrs & Harrison Co...847
Stott Garden Imp Co .856
Struck J N & Bro ... 861
Stuntevant E D 856
Styer J J 854
Sunderbruch H L 851
Swayne Edw 855
Swayne Wm.....855
Tilton Bros 846
Tonner John P.....856
Tricker Wm.....859
U S Wind Engine & Pump Co.....862
Vaughan J C 858
Waterbury Rubber Co.861
Weaf T W.....854
Weeb .....
Weic .....
Wolf .....
Whit .....
Wight W T .....
Wilks S Mfg Co.
Wisconsin Flower Ex. 856
Wolff L Mfg Co. 860
Wood Bros.....855
Young Bros..... .. 849

PRINT your spring trade list in our special rose number, March 30.

CYPRESS GREEN HOUSE MATERIAL

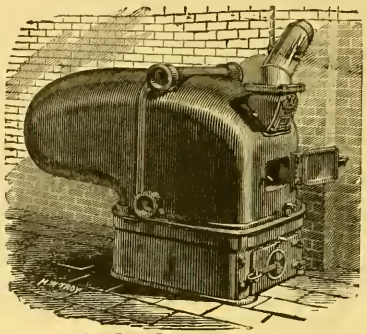
CLEAR CYPRESS SASH BARS

HOT BED AND VENTILATING SASH

JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

GREENHOUSE HEATING AND VENTILATING

Horticultural Architecture and Building.



HITCHINGS & CO.

Established 1844.

233 Mercer St., New York.

FIVE PATTERNS OF BOILERS.

NINTEEN SIZES.

Perfect Sash Raising Apparatus.

Rosehouses, Greenhouses, Etc, of Iron Frame Construction, Erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frome Benches with the "Perfect Drainage Bench Tile" or Slate Top.

SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUE.

WEATHERED'S DOUBLE DOME BOILERS

Are the Very Best.

OUR

Patent Rocking

AND

Shaking

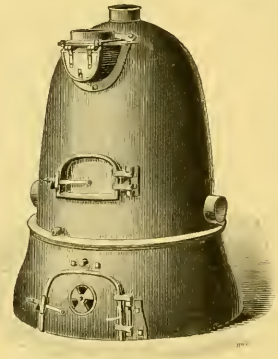
Grates

ARE

ABSOLUTELY PERFECT,

Being in the smallest sections are the least costly to keep in repair.

Send 3 Cents Postage for CATALOGUE and please mention this paper.



Proven by 40 years USE

Effective and Durable.

PATENT

Sash Raising Apparatus.

ROSE HOUSES, GREEN HOUSES, ETC.

of Iron Frame Construction, erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frame Benches with Drainage Bench, Tile or Slate.

THOMAS W. WEATHERED'S SONS, (Incorporated) 244 CANAL ST., N. Y.

Goodell Hist Mass Agri Col 1893

EVERY BODY TELLS ME,

AND NOW I TELL YOU

THE "NEW DEPARTURE"

Is the BEST and the Cheapest

Ventilating Appliance

That has ever been introduced for FLORISTS' USE.

See what This man Says about it.

MACOMB, ILL., Feb. 21, 1893.

MR. J. D. CARMODY, *Dear Sir:*

The ventilating apparatus received of you we finished putting up yesterday, and it works fine—I don't know how any one could ask more—as it raises the windows in a 100-foot house easily and evenly. If I had known a ventilating apparatus could be bought for so little money I would have ordered one for the house I built last year; and if I build another next year you can count on an order.

Very respectfully, I. L. PILLSBURY.

J. D. CARMODY, - - Evansville, Indiana.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.

JOHN G. ESLER, Sec'y F. H. A., Saddle River, N. J.

THE AMERICAN FLORIST

A WEEKLY JOURNAL FOR THE TRADE

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, MARCH 30, 1893.** **No. 252**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company.
Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,

322 Dearborn Street, CHICAGO.
Eastern Office: 67 Bromfield St., Boston.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis, Mo., August 9 to 12, 1893.

CONTENTS.

Roses—Comments on varieties 867
—Sunset, Bridesmaid and Hoste (illus). . . 868 869
—Meteor roses (illus) 871
—House of Meteors (illus) 873
—Roses and roses (with five illus) 884
—The rose meu at school (cartoon) 884
—Rose melange 884
—Stocks for garden roses 886
—The Scallen basket (illus) 887
—Notes on tea roses 894
—Classifying young rose plants (two illus.) . . 890
—The American Rose Society 890
—Meteor 891
—New American seedling roses 891
New York 892
Boston 896
How to grow cut flowers 904
A rose deal 906
Seasonable hints 908
The week after Easter 910
Chicago 912
Philadelphia 914
St. Louis 916
Toronto 918
Now watch the ventilators 920
The World's Congress Auxiliary 920
Buffalo 922
Baltimore 924
Worcester, Mass 924

The Rose.

Lovely roses differ
As does the human race;
Some, of surpassing beauty—
Another's witching grace—
So captivates the fancy
Aye, holds it too, as well,
That one, indeed, is powerless
To resist her magic spell.

With all her grace and beauty
'Tis not strange we call her "Queen,"
Other flowers are forgotten
When once the Rose is seen. G. P. R.

THAT THE ROSE is still the "Queen of Flowers" is fairly demonstrated by this issue of the FLORIST. We expected to make this number larger than any other special number yet issued, but we confess it expanded beyond our most sanguine expectations. It contains sixty-four pages, an increase of twelve pages over any previous special number, and forty pages more than our regular issue. Yet in spite of this large increase in space we have been obliged to omit several articles and illustrations intended for it. These will appear in subsequent issues.

Comments on Varieties.

In the following list will be found the comments of Messrs. E. G. Hill, Richmond, Ind. (H—); John N. May, Summit, N. J. (M—): and Antoine Wintzer, of the Dingee & Conard Co., West Grove, Pa. (W—), upon nearly all the roses in commerce in America to-day, with the exception of the new varieties that we have not yet had long enough to thoroughly test. We believe this general and comparative review of existing varieties will be very acceptable to our readers.

A. Geoffrey St. Hilaire. H. R. 1879. E Verdier. Red, shaded crimson, medium size, full, fine form, fragrant and free. W—Not vigorous enough for general cultivation.

A. M. Ampere. H. R. 1881. Liabaud. Flower of good size, double and cupped; color rosy purple. W—Superseded by better varieties.

Abel Carriere. H. R. 1875. E. Verdier. Large, full and fragrant; velvety crimson, very bright center. H—A most magnificently colored variety, of faultless form, but unfortunately a poor grower; almost worthless on its own roots for outdoor culture; W—Good only in favorable location.

Abel Grand. H. R. 1865. Damaizin. Glossy rose color, large, full and fragrant. H—Distinct and useful for outdoor culture; very free in the production of fine large full flowers; good for forcing in pots for market purposes in spring.

Abricote. Tea. Large, double and cupped. Color rosy apricot center shading to chamois. H—Superseded by a number of later introductions.

Achille Gonod. H. R. 1864. Gonod. Rosy carmine, raised from Jules Margottin. H—A coarse growing variety, producing undersized flowers. Superseded; W—Good, but not first class.

Adam. Tea. 1838. Adam. Salmon-rose, fragrant. H—Synonymous with President. A fairly good bedding variety; M—Good, but superseded, still valuable as a variety; W—Fine buds, good bedder.

Adelina Viviand Morel. N. 1891. Bernaix. Three colors, apricot, bright canary and pale yellow. Strong tea odor. H—Pretty in its combination of colors; flower stem too weak and flower under the standard size.

Adrienne Christophe. Tea. 1868. Guillot fils. Apricot yellow. H—This is one of the most charming of all the combination colored teas. Delicious in scent, fine for pot culture. A moderate growing variety, throwing out stubby horizontal growths. A great favorite in England; M—A beautiful color, but rather shy; W—Uncertain.

Agrippina. Beng. 1789. Introduced from China to England. Rich crimson, good bedder. Best of its class. H—The most showy and attractive of all the Chinese varieties for bedding purposes. Unfortunately not hardy in the north; M—Still one of the very best bedding roses; W—Best red bedder of its class.

Alba Rosea. Tea. 1855. Sarter. H—Weak, superseded by Marie Guillot; M—Good, but superseded.

Alfred Colomb. H. R. 1865. Lacharme. Carmine crimson, large and full, globular and very fragrant. H—The perfection of a garden variety. Fine in pots also; W—One of the best.

Alfred K. Williams. H. R. 1877. Schwartz. Magenta red, shaded crimson, large full flowers, beautiful but not constant. H—A grand rose on the Manetti, worthless on its own roots. Short lived even when budded; W—Beautiful, not reliable.

Alexandrine Bruell. Cl. T. H—A creamy white seedling of Gloire de Dijon. Might be useful as a climber in the Gulf States and California.

Alice Dureau. H. R. 1867. Vigneron. Rosy lilac, globular form. H—Superseded; W—Superseded.

Alice Sisley. T. 1874. Guillot fils. Violet rose, not clear; fragrant. H—A good bedding rose, but too strongly dominated by a purple tint to be sought after; W—Good bedder, very fragrant.

Aly Pacha Cheriff. H. R. 1886. Leveque. Fiery vermilion, shaded velvety purple. Extra good. W—First class.

Amazone. Tea. 1872. Ducher. Yellow, reverse veined with rose, long buds. H—Flowers under size and lacking substance. Too much unproductive wood.

American Beauty (see Mme. Ferd. Jamain). The grandest of the forcing roses in America. H—Perhaps the most popular of all the forcing varieties of roses at the present time. This rose is an enigma to even the best culturists; its special requirements are certainly not known, as experience abundantly proves. We know a number of cases where absolute failure has followed its successful culture. The same soil and other conditions have been equal and yet failure has followed. This is not an exceptional case, but on the contrary, is nearly universal. One of the finest and most successful houses of American Beauty this year had in the soil a moderate amount of wood ash; the owner of the house thinks its well doing may be attributed to this. The ash may furnish one of the things lacking in the soil. An open, porous soil, moderately enriched, is the best suited to the growth of this particular rose. The use of Bordeaux mixt-

ure as a spray to keep down black spot is productive of good results, and certainly from the ease and cheapness of the formula there is no excuse for neglecting so simple an operation. Temperature generally adopted 56° at night, with abundance of air on all sunny days; M—Too well known to need further com-

SUNSET

ment; does best in rather light soil, with only moderate amount of manure.

Anna Alexieff. H. R. 1858. Lacharme. Rose color, large, double and freely produced. H—Forces well and can be depended on for a very early crop. There are many other varieties of H. R.s better in form and more pleasing in color; W—Good, one of the best for early forcing.

Anna de Diesbach. H. R. 1858. Lacharme. Lovely carmine, large, double, very free in bloom, fragrant and very hardy. H—Good for pot culture, fine for forcing. A good outdoor rose, but not as hardy as many of its class; M—One of the best early varieties for forcing, though not quite so popular as formerly; W—Good for bedding or forcing.

Anna Marie de Montravel. Pol. 1879. Rambaux & Dubreuil. Very small, full white flowers, fragrant. H—A unique and pretty little rose. Almost too slight in growth.

Anna Olivier. Tea. 1872. Ducher. Buff shaded rose. H—A charming rose for outdoor culture; M—A grand rose for open ground, particularly in southern states; W—Fine buds, good bedder.

Annie Laxton. H. R. 1873. Laxton. Medium sized, nicely formed flowers; rose with shadings of bright red. W—Worthy of culture.

Annie Wood. H. R. 1866. E. Verdier. Bright crimson, shaded vermilion. A good autumnal variety. H—A good rose for the open border; not quite as strong in growth on its own roots as could be desired.

Antoine Ducher. H. R. 1866. Ducher. Violet red, large, well shaped, fragrant; color fleeting. W—Good hardy rose.

Antoine Mermet. Tea. 1882. Guillot fils. Flower large, double and finely formed, rose shading to carmine, sweet and of good texture. H—Hybrid tea blood dominates; it is too purplish or lilac in color to retain a place in the lists.

Antoine Mouton. H. R. 1874. Levet. Deep rose tinged with lilac, fragrant and hardy. W—Very large, sweet, good.

Antoine Quihou. H. R. 1879. E. Verdier. Brownish crimson. W—Very rich color, requires extra cultivation.

Antoine Wintzer. H. R. 1884. E. Verdier. Large, double and of rosette form. Color clear rose shaded bright crimson. W—Fine, needs good cultivation.

Apolline. B. 1848. V. Verdier. Rosy pink, large and cupped. One of the best bedders. H—Not a desirable

BRIDESMAID.

color, but this rose has points of usefulness as a garden variety, which render it indispensable; M—Extra good bedder and almost hardy; W—Should be planted singly.

Archduke Chas. Beng. Laffay. Rosy crimson, variable. M—One of the very best bedding roses; W—Very changeable, flowers large and double, petals of great substance, a favorite bedder.

Archiduchesse Marie Immaculata. Tea. 1887. Soupert & Notting. Flower large and double, clear red with vermilion center and shadings of chamois. H—Not desirable.

Attraction. H. T. 1886. Dubreuil. Clear carmine and china rose, petals edged paler with yellow base. H—Not so good as Pierre Guillot, no room for it.

Auguste Mie (*Mme. Rival*). H. R. 1851. Glossy pink, quite tender. H—Might be retained for old association's sake, but long since superseded; W—Superseded.

Augustine Guinoiseau. (*White La France*). H. T. 1890. Guinoiseau fils. Fully described in calling it a very pale, satiny La France. First class. H—Like all the La France type this rose forces finely. We predict that this rose will be quite extensively grown by all who can use it immediately after being cut. It grows stronger than any of the La France type, and is withal a most beautiful rose when well grown. It likes a heavy clay loam and thrives in a temperature of 58° to 60° at night. It is not the best for long distance shipping, as it suffers from handling and confinement; M—A magnificent rose for forcing or bedding.

Baltimore Belle. P. 1843. Feast. Pale blush, changing to white. H—The best hardy light colored rose for the adornment of porch and trellis in the northern states.

Baron Alexander de Vrints. Tea. 1880. Gonod. Pale rose. M—No good for forcing.

Baron de Bonstetten. H. R. 1871. Liabaud. Velvety maroon, shaded deep crimson. One of the best. W—Very rich color, extra.

Baron de Fouville. Tea. 1886. Gonod. Coppery yellow, back of petals reddish. Large, full and of good shape. Sweet. M—Not good as a forcer.

Baron Nathaniel de Rothschild. H. R. 1882. Leveque & fils. Large, double and finely formed. Bright rosy crimson of even shade. W—Generally good.

Baronne de Rothschild. (Baroness Rothschild). H. R. 1867. Pernet. Light pink, often deepening to rose. Large and of elegantly cupped form. Scentless.

MME. HOSTE.

Quite hardy, difficult of propagation H—A most pleasing variety for pot culture and forcing under glass. Climatic conditions are against its growth in the open air in the western states; have never known it to make growth planted outdoors; M—Still the finest of all in its class for forcing, with magnificent foliage close to bud. Propagates as easily as any known rose; requires rich soil to get it at its best; W—Fine with high culture.

Baronne Henriette de Loew. Tea. 1889. Nabonnand. Flower medium

AS GROWN BY MR. GROVE P. RAWSON. FLOWERS SHOWN LIFE SIZE.

sized, full tender rose shading to yellow. M—Useless as a forcing variety.

Baronne M. Werner. Tea. 1884. Nabonnand. White, center coppery rose. Very large and very full. M—No good for forcing; W—This is one of the best teas for bedding; the flowers are very double and the petals rather thin; this is its weak point.

Baronne Nathaniel de Rothschild. H. R. 1885. Pernet pere. Beautiful bright rose, with silvery shadings, very large and full. H—Inclines to come washy and dull, of no special merit.

Baronne Prevost. H. R. 1842. Deprez by Cochet. Pure rose color, large, full and flat, free in bloom, fragrant and hardy. H—A grand old H. R. Difficult to propagate, but should be retained on account of its great hardiness. Shape of Souvenir de la Malmaison, by some styled a quartered rose.

Barthelemy Levet. H. R. 1878. Levet. Bright rose. H—Seedling of Gloire de Dijon, of special merit in the U. S.

Beaute de l'Europe. Cl. T. 1881. Gonod. Deep yellow; of Gloire de Dijon type. H—Seedling of Dijon, of special merit in the U. S.

Beauty of Stapleford. H. T. 1879. Bennett. Red, tinged violet; large, well formed buds. Subject to mildew. H—A fine rose in the open ground, but mildews dreadfully, which almost neutralizes its qualities of color and form.

Beauty of Waltham. H. R. 1862. Wm. Paul. Rosy crimson, medium to large; fragrant. H—A grand outdoor rose.

Belle Fleur d'Arjou. Tea. 1872. Tourais. Flower large and double, center rosy flesh, shading to shining white. W—Good bedder.

Belle Lyonnaise. Cl. T. 1869. Levet. Pale lemon yellow; of Gl. de Dijon type. H—A distinct light colored rose of the Dijon type. A rampant climber in the conservatory.

Bessie Johnson. H. R. 1872. Curtis. Blush; highly scented. W—Generally satisfactory.

Bianqui. Tea. 1871. Ducher. Large, double pure white. H—Long since superseded.

Black Prince. H. R. 1866. Distributed by Wm. Paul. Dark crimson, variable. H—A most magnificent colored rose, so chary of its blooms as to be worthless; W—Not reliable.

Blanche Moreau. P. M. 1880. Moreau-Robert. White, one of the best of the mosses. H—A good white moss.

Blanche Rebatel. Poly. 1889. Bernaix. Bright and pretty; carmine, turning to crimson. H—A poor color, worthless.

Boieldieu. H. R. 1877. Garcon. Cherry red, very large and full, flat form. Of the type of *Baronne Prevost*. W—Very large, double, uncertain.

Bona Weillschott. H. T. 1890. Soupert & Notting. Flower large, double and of centifolia form. Rosy vermilion, center orange red. Sweet. H—Lacks size, given to growth, not free enough; M—Not satisfactory as a forcing rose.

Bon Silene. Tea. 1839. Hardy. Deep rosy pink, shaded carmine, semi double, sweet and free. Once largely used for forcing; now set aside for varieties more double. H—Too well known for comment to be necessary. Should be retained for the good it has done; M—Still a great favorite with many and in demand to some extent; W—Not very double, shows up best in cool weather. Good bedder, almost discarded as a forcing rose.

Bougere (Syn. Clotilde). Tea. 1832. Bougere. Bronzed pink, large and full, thick petals; one of the hardiest. A grand old sort. H—In some sections considered a fine outdoor bedding rose. The outer petals come crimped and green.

Boule de Neige. H. N. 1867. Lacharme. White, small, very full; does not root from cuttings very well. H—Unquestionably the finest of the white hybrid noisettes; hard to root; W—One of the best white, but difficult to root. Nearly all the plants sent out in this country under the name *Ball of Snow* have been Coquette des Blanches, causing confusion.

Boule d' Or. Tea. 1860. Margottin. Deep yellow, large and full; does not open well in America, fine in Europe. H—Superseded by larger flowered varieties.

Bouquet d'Or. N. 1872. Ducher. Yellow, coppery center, large and full. H—Superseded by larger flowers.

Bouton d'Or. Tea. 1866. Guillot, fils. Orange yellow, of medium size. H—Superseded by better flowers.

Bridesmaid. Tea. 1892. Moore. Sport from Catherine Mermet, deeper in color than its parent; very free and vigorous. H—One of the most valuable varieties recently introduced. It has all the good characteristics of Mermet, with the additional merit of coming deep-colored throughout the days of mid-winter. It looks as if it were destined to usurp the place occupied by Catherine Mermet. The color is the pleasing tint of Mermet when at its best, with no malformed buds; this variety will be extensively planted when its merits become known; the same culture, soil, and temperature that suits Mermet will be right for this rose; M—This will be a great favorite in the near future, bright clear pink, retaining its color in all weathers. Equal to its parent, the Mermet, in constitution.

Brightness of Cheshunt. H. R. 1882. Paul & Son. Larger than medium; nicely imbricated; brilliant red. Good autumnal bloomer. H—A splendid high-colored red rose that should be extensively grown in America. W—Fine but uncertain.

Brilliant. H. R 1887. Wm. Paul & Son. Medium size, full, scarlet crimson. H—Good color, fine for pot culture.

Camille Bernardin. H. R. 1865. Gautreau. Light crimson, medium sized, half cupped form, fragrant. H—Not double enough, superseded.

Camoens. H. T. 1881. Schwartz. Pale rose, base of petals yellow. H—Lacks substance, not desirable; M—Pretty, but unsatisfactory as a forcing variety.

Canary. Tea. 1852. Guillot pere. Canary yellow, beautiful small buds, delicate habit. H—Too small, others better.

Capitaine Lefort. Tea. 1889. Bonnaire. Very large, fine china red shaded purple. H—Not free enough in bloom, excessively vigorous; W—Flowers large and double, good bedder.

Captain Christy. H. T. 1873. Lacharme. Delicate flesh, rosy center; of medium size, full. Extra good. H—A good rose for flowering in pots. Does not thrive well in open ground; M—A very beautiful rose, and good for forcing later in the season.

Cardinal Patrizzi. H. R. 1857. Trouillard. Crimson, tinged with purple, of the *Giant of Battles* type. W—Beautiful, poor grower; all this type succeed better farther south.

Caroline d' Arden. H. R. 1888. A. Dickson & Son. Pure rose, very large and fragrant. H—A fine hardy out-door rose, of the shape and style of Baronne Prevost.

Caroline de Sansal. H. R. 1849. Desprez. Flesh color deepening toward the center. Large full, flat flowers; very hardy. Unreliable. H—Comes imperfect, useless; W—Flowers often imperfect.

Caroline Kuster (or Custer). N. 1872. Pernet. Lemon yellow, changing to white, large, full, and globular. H—A vigorous growing, free flowering yellow rose.

Catherine Mermet. Tea. 1869. Guillot fils. Flesh pink, large, full, of grand form; one of the most beautiful of the teas, and a leading forcing variety. H—Succeeds well with most growers. Has been unquestionably the best pink forcing rose of recent years; it has, however, a dangerous rival in its offspring the Bridesmaid. If prophecy is in order we predict that Bridesmaid will be grown to the exclusion of Mermet in the very near future. Soil has a great deal to do with the successful culture of Mermet; in fact in a too light soil it does not seem to thrive. Some growers place great importance in the selection of proper soil, but I fear not one could give a concise statement of what constituents the soil should be composed. It is with all growers a matter of experiment. After trying various kinds of soil the one in which the rose flourishes best is of course the one which decides the question. Some day scientific analyses will tell us the constituents lacking or those that are in excess. Temperature: 60° will bring a larger quantity of buds, but a lower temperature will bring larger buds of finer color; M—A typical rose; the most elegant shape of all tea roses, an excellent variety for forcing; W—A favorite for forcing under glass; not as good outside bedder as some other varieties, foliage somewhat tender.

Catherine Soupert. H. R. 1879. Lacharme. Rosy peach; distinct. W—Generally good.

Cecile Brunner. Poly. 1880. Veuve Ducher. Bright rose, yellow center; flowers in clusters, very beautiful. H—Worthless, no merit.

Celine Forestier. N. 1860. Trouillard. Pale yellow deepening toward the center. Very hardy. H—A nice pillar rose in suitable locations.

Champion of the world. 1892. J. L. Childs. Cross between Magna Charta and Hermosa. Perfectly hardy, perpetual bloomer, color deeper than Hermosa. W—Resembles Henri Plantier.

Chas. Darwin. H. R. 1879. Laxton. Brownish crimson, shaded violet, beautiful and distinct. Subject to mildew. H—A rose of considerable merit for outdoor purposes; W—Fine, but not reliable.

Chas. de Franciosi. Tea. 1891. Soupert & Notting. Long buds of orange red color; flower large and double; chrome yellow and salmon. H—A fine rose for flowering in pots for spring sales.

Chas. Dickens. H. R. Wm. Paul. Rose color, large and full, profuse bloomer and hardy. W—Good.

Chas. Lefebvre (Syn. Marguerite Brassac). H. R. 1861. Lacharme. Reddish crimson, very dark shadings, fades quickly. Large full heavy petals beautifully formed. A splendid rose. H—A fine rose when worked on the Manetti or other stock. Somewhat tender in the north; W—Beautiful, but uncertain.

Chas. Legrady. Tea. 1884. Pernet fils. Carmine red, petals faintly edged white. Large and full. W—Good for bedding.

Chas. Rovolli. Tea. 1875. Pernet. Carmine rose. H—A fairly good bedding rose; M—A very beautiful variety, much larger than Bon Silene, and of lighter color. Very free blooming; used to be a great favorite, but now superseded; W—More double than Bon Silene; with us this variety has always done well, and is a fine bedder.

Chas. Verdier. H. R. 1866. Guillot pere. Pink with salmon tinge, globular,

METEOR ROSES. [SEE PAGE 891]

full flowers. Seedling of V. Verdier. Does not open well. W—Superseded.

Charlotte Corday. H. R. 1864. Joubert. Flower large, double rosy purple, reverse of petals white. W—Only fairly good.

Chateau des Bergeries. Tea. 1886. Ledechaux. Pale canary, darker center: large, globular, and very full; fine in bud. M—No good.

Christine de Noue. Tea. 1891. Guillot & fils. Deep pink, turning to china rose, full and fine. H—A fine bold handsome rose, possessing vigor, size, and other good qualities. It is being used experimentally to test its forcing qualities.

Claire Cochet. H. R. 1885. Lacharme. Beautiful clear rose, center darker. Very large and full, large petals. W—Fine, rather difficult to root.

Claire Sylvain. (*Lady Warrender*). Bengal. Mme. Pean. White, strongly infused with tea blood. H—Superseded by Marie Guillot.

Clement Nabonnand. Tea. 1877. Nabonnand. Light yellow, shaded salmon. Not very valuable. H—Too thin in texture; M—Of little value.

Cleopatra. Tea. 1890. Bennett. Large, double, and long in bud. Tender rose, changing to glowing rose. H—No particular place for this variety; M—No good.

*Climbing Captain Christy. H. Cl. 1881. Ducher.

*Climbing Chas. Lelebvre. H. Cl. 1876. Cranston.

Climbing Devoniensis. Cl. T. 1858. S. J. Pavitt.

*Climbing Edouard Morren. H. Cl. 1879. G. Paul.

*Climbing Gen. Jacqueminot. H. Cl. Cooling.

*Climbing Jules Margottin. H. Cl. 1875. Cranston.

†Climbing La France. Cl. T.

*Climbing Mlle. Eugenie Verdier. H. Cl. 1877. G. Paul.

*Climbing M. Boncenne. H. Cl. 1885. Schwartz.

†Climbing Niphetos. Cl. T. 1890. Keynes. A valuable addition. M—Very shy.

†Climbing Perle des Jardins. Cl. T, 1890. John Henderson. Extra good, fine for southern states and Pacific coast. M—Very valuable greenhouse climber.

*Climbing Pride of Waltham. H. Cl. 1885. Schwartz.

*Climbing Victor Verdier. H. Cl. 1871. G. Paul.

[*H—Climbing H. R. roses may be criticized in a lump; of no special value in the U. S., on account of the canes killing to the same height as the varieties from which they sported. In the case of a weak growing variety it might be well to propagate the climbing variety, as the English term them, in order to secure the increased vigor, but in doing this it might be sacrificing size of flower for increased vigor in the plant, as some of the sports produce flowers less in size than the original form whence they sprung.]

[†H—Climbing Niphetos, Climbing Perle des Jardins, Climbing La France. These are useful for posts and as climbers in conservatories and greenhouses, but many are under the impression that they bloom continuously; such is not the case. They partake of the character of Gloire de Dijon and Marechal Niel, and wherever these are useful the three climbers mentioned above will be of service and value.]

Cloth of Gold. Chromatella. N. 1843. Coquereau. Raised from Lamarque. Deep yellow with sulphur edges, large full flowers. A grand rose. H—A tender climber. Grand for porch and veranda in California and Gulf states; M—The grandest of all yellow roses for the south, or where it will stand out doors all the time.

Clothilde Soupert. Poly. 1890. Soupert & Notting. Blooms produced in profusion; the largest of the polyanthas. Color, glowing pink center, shading to white, very double, cupped, an ideal rose for bedding or for pots. H—An ideal bedding rose; splendid for pot culture. This will undoubtedly prove one of the finest market plants. It is claimed to be hardy in the north; if this proves true it puts this particular rose in the front rank in all that goes to make a border rose. Unquestionably the finest of all the polyanthas.

Comice de Tarn et Garonne. B. 1852. Pradel. Carmine red, well formed. H—The variety Red Malmaison is in every way superior to this old variety.

Comte de Barbantane. B. 1858. Guillot pere. Blush shaded with rose. H—Pretty in color, free in bloom, much to commend it as a pot market plant. Much superior to Bourbon Queen and Mme. Bosanquet.

Comte de Paris. Tea. 1844. Mme. Pean. Flesh color, large flowers. H—An old tea, now superseded; M—No good as a forcing variety.

Comte Henri Rignon. H. T. 1889. Pernet Ducher. Very large and double, soft rosy flesh of exquisite shade. H—Too short jointed in growth, makes many abortive attempts to perfect its flowers. Occasionally a fine flower is produced. Too uncertain.

Comtesse Anna Thun. Tea. 1888. Soupert & Notting. Very large globular flower, peculiar and pleasing color, golden apricot with saffron shadings.

H—Very massive, heavy buds, which often fail to perfect themselves. A beautiful rose when perfect; M—Not reliable; W—A beautiful yellow rose, very large and double. Petals are tender, only good in favorable climate.

Comtesse de Caserta. Tea. 1877. Nabonnand. Coppery-red. H—Not unlike Bon Silene, out of date; M—Beautiful, but not satisfactory as a forcer; W—Good bedder.

Comtesse Eva de Starhemberg. Tea. 1891. Soupert & Notting. Large and full; buds very long, petals large and thick, color creamy yellow, centre ochre. H—A grand bedding rose for summer; fine massive buds; M—No good; W—Flowers large and double, fine buds, good bedder; this may prove to be a good forcing rose.

Comtesse de Labarthe. (Syn. *Duchess de Brabant*). Tea. 1857. Bernede. Pink shaded carmine rose, pretty in bud. H—An excellent bedding and pot rose—has defects, however; M—One of the very best for bedding purposes, no good to force; W—Flowers large, not very double; owing to its free-flowering habit and vigorous growth, one of the best for bedding.

Comtesse de Frigneuse. Tea. 1885. Guillot. Bright canary yellow, quite full and free. Slender drooping stems. H—Uncertain. Comes with a crook in the flower stems; M—Very pretty, but superseded.

Comtesse de Nadaillac. T. 1871. Guillot fils. Coppery yellow, illumined carmine rose; large, full and distinct. H—Should be better known and more extensively grown. A most unique rose in its exquisite colorings. Does not force; M—Very pretty, but not a good forcer.

Comtesse de Paris. H. R. 1882. Leveque fils. Large, double, globular and of perfect form. Bright rose, bordered white.

Comtesse de Serenye. H. R. 1874. Lacharme. Silvery pink, a full, finely shaped globular flower. Medium sized. W—Fine free bloomer.

Comtesse Riza du Parc. Tea. 1876. Schwartz. Bronzed rose with carmine tint; medium sized, moderately full; raised from *Comtesse de Labarthe*. H—Seedling from Comtesse de Labarthe, with a decided bronze tint. Not quite free enough.

Constantin Petriakoff. H. R. 1877. Jamain. Cherry red, large and double. Scentless. H—Generally good, but not sweet; M—Fine bedding variety only; W—Vigorous grower, good bedder, but not as free bloomer as its parent.

Coquette des Alpes. H. N. 1867. Lacharme. White, tinged blush; medium-sized, semi-cupped. Very popular. H—A charming hybrid noisette of perfect contour.

Coquette des Blanches. H. N. 1871. Lacharme. White, sometimes tinged blush, medium-sized, full, and rather flat. Very pretty. H—Another valuable rose. Like all the hybrid noisettes requires protection in winter; W—One of the best of its class.

Coquette de Lyon. Tea. 1870. Ducher. Pale yellow, of medium size; a fine bedder. H—Useful for massing in summer, for the flowers and buds are undersized and not worthy of individual culture; M—Bedding purposes only.

Cornelia Koch (*Cornelia Cook*). Tea. 1855. A. Koch. Raised from Devoniensis. White, often tinged with lemon. Very large and full, not free. H—Worth retaining on account of its size; M—A grand rose when well done, but requires special treatment. Then it forces well and blooms very freely, but buds are very liable to get discolored; W—Very large and double, but not as free as desirable.

Countess of Oxford. H. R. 1869. Guillot pere. Carmine red, tinged lilac; flowers large and full, subject to mildew. H—A valuable rose for the garden; W—Free bloomer, not sweet, of V. Verdier type.

Countess of Pembroke. H. T. 1882. Bennett. Delicate satiny rose, large and full; fragrant and very perfect. H—A fine rose, but lacking in definiteness of color.

Crested Moss (*Cristata; Crested Provence*). M. 1827. Vibert. Discovered on the wall of a convent near Fribourg. Deep pink colored buds, with mossy fringe and crest. Excellent. H—The buds are exquisitely dressed with rich fringes of moss.

Crimson Globe. Cent. moss. 1891. Wm. Paul & Son. Buds well mossed, large, double, and globular; rosy carmine. H—A highly promising moss rose.

Crown Prince. H. R. 1881. W. Paul & Son. Large and full; purplish crimson. H—Too purplish in color, otherwise a good rose for the garden.

Danmark. H. T. 1891. Zeiner & Lassen. Large globular flower, clear rose, brighter center; very fragrant. H—Said to be a seedling from La France. Large globular flowers, shaped more like a true H. R. Does not force in winter.

David Pradel. Tea. 1891. Lilac rose, large. M—No good as a forcing rose; W—Large and double, sometimes very good, but changeable.

Devoniensis. Tea. 1841. Foster. Creamy white, center often tinged blush, very large, almost full; very sweet. H—A grand old rose, subject to mildew, however, and thin in petal; M—When grown in a cool temperature this is one of the most beautiful roses known; W—Very large, and one of the most fragrant roses. A fine bedder a few degrees south of Philadelphia, and in favorable seasons behaves well here.

Distinction. H. T. 1882. Bennett. Peach pink, free and fine. H—Useless.

Dr. Andry. H. R. 1864. E. Verdier. Rosy crimson; large, semi-cupped, double, full, fades badly. Considered good in England. H—A good garden rose in the hardy section.

Dr. Arnal. H. R. 1848. Roeser. Red, shaded crimson, medium size. W—Fine color, poor grower.

Dr. Berthet. Tea. 1878. Pernet. Pale rose, deep in center. M—Pretty, but superseded.

Dr. Sewell. H. R. 1879. Turner. Bright crimson, shaded purple. W—Good.

Dr. Grill. Tea. 1886. Bonnaire. Coppery yellow, back of petals china rose. Large and full, extra good. H—Much thought of in Europe. A fairly good bedding rose here; W—Free bloomer, good bedder.

Douglass. Beng. 1848. V. Verdier. Crimson, medium size; fine in bud. W—Fine bud, fine bedder.

Ducher. Beng. 1869. Ducher. Pure white, well formed. H—Too thin in petal, a flimsy flower.

Duchess of Albany. H. T. 1888. W. Paul. Much darker than La France. A leading forcing rose in this country. H—Sport from La France, a fine forcing variety. Does well, or rather best, in an open clay loam, lightened with leaf mould. Color comes dark and rich when grown in about 54°. Inclined to turn purple if not used soon after being cut. Not considered a good shipper; M—One of the finest of all the H. T. family, for summer blooming, also spring and fall, but a little inclined to get off color in midwinter.

Duchess of Bedford. H. R. 1879. R. B. Postans. Cherry red of V. Verdier type. H—Inclines to burn badly in our hot June suns, otherwise a fair garden rose.

Duchess of Connaught. H. T. 1879. Bennett. Silvery rose, large and globular, full and fragrant. H—Worthless.

Duchess of Edinburgh. H. R. 1874. Dunand. Pink, of Jules Margottin type. H—Too shy, not worth growing.

Duchess of Edinburgh. Tea. 1874. Nabonnand. Crimson turning lighter. A tea with Bengal blood. H—Considered by many inferior to Papa Gontier. Worth retaining, however; M—Valuable yet in some sections. Requires cooler treatment than ordinary teas.

Duchess of Leeds. H. T. 1888. Mack. Darker than La France, each petal lined pearl color. Very thick petals. H—A fairly good rose in all save color, lilac and purple predominating.

Duchess of Westminster. H. T. 1879. Bennett. Satiny pink, turning to rose. Subject to mildew. H—No good; M—No good.

Duchesse d' Auerstaedt. Tea. 1887. Bernaix. Pure yellow, shaded nankin; large. M—Not reliable.

Duchesse de Bragance. Tea. 1886. Dubreuil. Bright canary yellow; paler edges. M—Not reliable; W—Fine clear color.

Duchesse de Cambaceres. H. R. 1854. Fontaine. Lilac rose, poor color, double. W—A favorite variety in the old days of root grafting, but generally worthless.

Duchesse de Thuringe. B. 1847. Guillot pere. White, lightly tinged lilac, free. H—Not equal to Comte de Barbantane; W—Strong grower, blooms in large clusters.

Duchesse de Vallombrosa. H. R. 1875. Schwartz. Pink; not valuable. H—Useless on its own roots. A peculiarly colored rose, esteemed in Europe, where it is worked on stocks.

Duchess Marie Salviati. Tea. 1890. Soupert & Notting. Orange chrome, lightened with rose. H—Dauby in color, lacks definiteness; M—Not reliable; W—Sometimes clear yellow, free bloomer, fine for bedding.

Dudley Baxter. H. R. 1880. Paul & Son. Rosy carmine, large and double; superb color. W—Worthy of more general culture.

Duke of Connaught. H. R. 1875. G. Paul. Deep velvety crimson, lightened bright red. Of little value in this country. H—Lacks constitution and vigor; of no value on that account: W—Fine, but variable.

Duke of Connaught. H. T. 1879. Bennett. Large rosy crimson, good in bud; H—Lacks constitution and vigor; of no value on that account.

Duke of Wellington. H. R. 1864. Granger. Red, shaded crimson. A grand rose; should be better known. H—A grand rose, splendid in color, fine for pot culture; W—Fine rose.

Earl of Beaconsfield. H. R. 1880. Christy. Cherry rose of medium size and beautiful form. W—Fine with high culture.

Earl of Dufferin. H. R. 1888. Dickson & Son. Large and full; rich velvety crimson shaded maroon. One of the best dark roses. H—The finest and best of all the dark roses. A grand rose for the garden; M—One of the best varieties known

HOUSE OF METEOR ROSES AT F. R. PIERSON CO.'S, TARRYTOWN-ON-HUDSON, N. Y. [SEE PAGE 891]

for summer bedding, but not a good forcer.

Earl of Pembroke. H. R. 1882. Bennett. Velvety crimson, petals edged bright red. H—Too dull in color, otherwise a fairly good rose.

Eclair. H. R. 1883. Lacharme. Large and double; bright fiery red; a grand variety. W—Very good.

Edmond Sablayrolles. Tea. 1889. Bonnaire. Large and full; a mingling of pink and carmine and yellow. H—Buds too small to be useful; M—Not good; W—Good for bedding.

Edouard Gautier. Tea. 1884. Pernet-Ducher. Large and globular, full and of heavy texture. Center rosy chamois, outer petals white, reverse lined with rose. Seedling from Devoniensis; H—No account; M—No good.

Edouard Michel. H. R. E. Verdier. Carmine red, shaded purple; large, full and globe shaped; first rate. W—Fine.

Edouard Morren. H. R. 1868. Granger. Deep cherry rose, large flat flowers, very full. H—A useful H. R. rose, of strong growth and foliage.

Edouard Pynaert. H. R. 1877. Schwartz. Red, shaded crimson purple, a bad color; medium or small; fragrant. H—Poor grower, not worth growing; W—Sweet, poor grower, poor form.

Ella Gordon. H. R. 1885. Wm. Paul & Son. Large double flower, globular in form; color bright cherry red. H—Fine for pots, of splendid color. A first-class rose.

Ella May. Tea. 1889. Smith. An improvement on Sunset; flower of deeper color. H—Did not fulfill expectations; M—Beautiful color, but so far no improvement over Sunset.

Elisa Boelle. H. N. 1869. Guillot pere. White, delicately tinged with pink; medium sized; full circular form. A lovely rose. H—A charming little rose, evidently a cross between the Noisette and H. R., well worthy of culture for pots; W—Beautiful, but poor grower.

Elisa Chatelard. Poly. 1891. Bernaix. A profusion of beautiful flowers of fresh rosy carmine color. H—Dull in color, of no value whatever.

Elisa Fugier. Tea. 1891. Bonnaire. Exactly like Niphetos, but with yellow shadings; of very strong growth. H—A meritorious rose, evidently of Niphetos parentage, more creamy in color than its parent, a useful rose; M—Not reliable.

Elise Sauvage (*L'enfant Trouve*). Tea. 1818. Miellez. Orange yellow of medium size and full. H—Superseded.

Elizabeth Vigneron. H. R. 1865. Vigneron. Bright pink and fragrant. W—Quite good.

Emily Laxton. H. R. 1877. Laxton. Cherry rose, beautiful in bud. W—Good.

Empereur de Maroc. H. R. Guinoiseau. Crimson tinged with purple; of Giant of Battles type.

Empress of India. H. R. 1876. Laxton. Bronzy crimson, globular and fragrant. Fine, when carefully grown. H—Too shy in blooming, a fine rose when perfect.

Ernest Metz. Tea. 1888. Guillot. Color tender carnation rose, brighter in the center and deeper on the reverse. H—A large fine rose, but too shy in the production of its flowers. Great hopes were raised over this rose that it might be a good forcing variety. Alas, no! M—Extra large, but not reliable as a forcing rose; W—Flowers very large and double, buds very fine, produced on strong stems; good for bedding.

Esther Pradel. Tea. Pradel. Flower medium and double, color chamois passing to salmon. M—No good.

Etendard de Jeanne d'Arc. Tea. 1884. Garcon. Introduced by Jules Margottin, fils. Flowers of extra size and very double, creamy white, passing to pure white; of Gloire de Dijon type. H—Of no particular value in America; M—No good.

Etienne Levet. H. R. 1871. Levet. Carmine red; one of the finest of the V. Verdier type. H—A most useful hybrid rose for the garden, does not do well forced.

Etoile d'Angers. Tea. 1891. Tesnier, fils. Large, double, globular flower; yellow bordered rosy peach; color new and distinct. M—Not reliable.

Etoile de Lyon. Tea. 1881. Guillot. Deep yellow, double, very beautiful, a good bedder. H—One of the hardiest of all the tea varieties, if not the hardiest. A most useful and valuable rose, in spite

of its tendency to mildew; M—Good bedder only; W—Flowers very large, very double; have counted 140 petals to a single flower. This rose is almost as hardy as Hermosa; it has endured several cold winters here without protection and the writer has cut fine buds from this variety as late as November. I consider this the best yellow bedding rose in cultivation; should be in every garden.

Eugene Appert. H. R. 1859. Trouillard. Velvety maroon, shaded deep crimson, type of Giant of Battles. W—Of most beautiful color, but difficult to grow.

Eugene Beauharnais. Beng. 1865. Moreau. Crimson, not so good as Agrippina. W—Bright crimson, habit of plant compact, good bedder.

Eugene Furst. H. R. 1876. Soupert & Notting. A large flower, made up of large petals, quite double, velvety crimson. H—After the style of Gen. Jacqueminot, but larger and stronger in growth. A valuable rose indeed; W—Good rose with careful culture.

Eugene Meynadier. Tea. 1883. Nabonnand. Very large and very double, imbricated, color violet. H—Off color, no particular value.

Eugenie Verdier. H. R. 1869. Guillot fils. Silvery pink tinged with fawn, fine in bud, one of the best of the V. Verdier type. H—No good on its own roots, a fine rose when grafted, even then it requires good culture; W—Generally good.

Exadelphe. Tea. 1885. Nabonnand. Large and full, beautiful yellow. H—Too single, worthless; M—Not reliable in any position; W—Good bedder.

Exposition de Brie. H. R. 1865. Granger. Same as Maurice Bernardin. H—A grand garden rose, good in growth and fine in color.

Fellemberg. N. Rosy crimson, like Eugene Pirolle. Out of date. H—A bramble, of no value whatever.

Fisher Holmes. H. R. 1865. E. Verdier. An improved Gen Jacqueminot, a very valuable sort. H—Valuable; W—One of the best.

Flora Nabonnand. Tea. 1877. Nabonnand. Canary yellow edged rose. M—Not reliable.

Fontenelle. H. R. 1877. Moreau-Robert. Carmine red. W—Fine red, very double, worthy of more general cultivation.

Francois Levet. A. Levet. Cherry rose, medium size. W—One of the best roses of its class for general cultivation.

Francois Michelon. H. R. 1871. Levet. Very valuable in June and July, when it is at its best; also a fine autumn bloomer. Deep rose tinged with lilac, very large, full and fine, fragrant and free. H—Fine on worked or grafted plants, especially free in autumn, does not thrive on its own roots; W—Good, but not always reliable on its own roots.

Francisca Kruger. Tea. 1879. Nabonnand. Large and double, chamois color brightened with yellow and rose. Extra good. H—A fine strong growing variety, producing splendid buds when bedded out. Not good for pots; does not force well; W—One of the best bedders.

Francisca Pries. Tea. 1889. Pries. Of medium size, somewhat cupped, and rose color. H—Absolutely worthless.

Furst Bismarck. Tea. 1889. Dreegemuller. Large and double, golden yellow. H—Of Dijon type, not specially valuable.

Furstin Bismarck. Tea. 1889. Dreegemuller. Large, full and imbricated. China rose, shading to rosy lake. H—Dijon type, not specially valuable.

G. Nabonnand. Tea. 1889. Nabonnand. Very large and full, rose with yellow shadings. W—Good bedder.

Gabriel Tournier. H. R. 1876. Levet. Rosy red, large globular flowers, in habit like Pæony. W—Good, hardy free bloomer, not always perfect, but generally good.

Gaston Chandon. Tea. 1884. Schwartz. Nicely formed, of medium size, double, cherry red, shading to chamois at the center. Seedling of Gloire de Dijon. M—No good.

Gem of the Prairies. Pr. 1865. A. Burgess. Rosy red, often blotched white, large flat flowers, slightly fragrant. H—A very disappointing rose in many ways. It should be characterized as a strong shrub instead of a climber.

Gen. Appert. H. R. 1881. Schwartz. Large, double and of fine form, rosy purple with very dark shadings. W—Quite good.

Gen. Jacqueminot. H. R. 1853. Rousselet. Brilliant crimson, not full, but large and extremely effective, fragrant, hardy. H—A rose everyone likes. Good in the garden, even in a half-starved condition, as is usually the case, but how different it looks when good treatment and liberal supplies of manure have been given. It responds to forcing treatment and does moderately well in pots. It has been popular for a third of a century and bids fair to hold its own for as long to come; M—Still one of the very best for early forcing and a general favorite; W—Old reliable.

Gen. D. Mertchansky. Tea. 1891. Nabonnand. Large, double and erect, tender flesh rose, with brighter center, very free. H—Of no earthly value whatever.

Gen. Tartas. Tea. Bernede. Deep mottled rose, tinged with buff, excellent. H—Dull in color, lacking in form and of no special value.

Gen. Washington. H. R. 1861. Granger. Red, shaded crimson, large, full and flat, very profuse, a fine garden variety. H—One of the best varieties for general cultivation in the garden. It has all the requisites of a good bedder, hardiness, vigor and freedom of bloom. The color of the Washington, when first opening, is certainly charming; the worst point in the rose is the quickness with which it loses its lustre after the sun strikes the bloom. Even with this defect the variety is indispensable for outdoor bloom. W—Not perfect in form, free bloomer, generally satisfactory.

George Peabody. B. 1857. J. Pentland. Rosy crimson, medium or small, full, well formed and fragrant. H—Weak in growth, of no particular value; W—One of the best crimsons in its class, but a poor grower in this section.

Georges Pernet. Poly. 1888. Pernet fils. One of the best, medium or small flowers in clusters, bright rosy pink. H—A charming little polyantha, deserving of general culture.

Gerard Desbois. Tea. Bright red, of good form, one of the hardiest and most useful of the class. H—Superseded by Souvenir de Wootton.

Germaine Caillot. H. R. 1887. Pernet. Rosy flesh, slightly tinted salmon, very large and full; a beautiful rose, but a very poor grower. H—This is a magnificent rose, but a miserably poor grower, which practically eliminates it from the list.

Giant of Battles. H. R. 1846. Nerard. Deep fiery crimson, very brilliant and rich on opening, but fading quickly. Delicate constitution and subject to mildew. H—Old associations warrant the continued cultivation of this old favorite. W—Fine when well grown, thrives better south of us.

Gipsy. H. R. 1884. Laxton. Very dark velvety red; flowers small. H—Flowers too small, useless.

Gloire de Dijon. Cl. T. 1853. Jacotot. A combination of rose, salmon, and yellow, very large, very full, globular; universally popular. H—Fine in the South for pillar and veranda; M—A grand climber for the south.

Gloire de l'Exposition de Bruxelles. H. R. 1891. Soupert & Notting. Large, double and well-formed; velvety purplish amaranth, lightened with bright red. H—One of the finest and best of all the dark roses; deserves to be extensively cultivated; W—A good rose, with name enough to kill it.

Gloire de Margottin. H. R. 1887. Margottin. Dazzling red; a fine bedder; large and double. H—Of slender twiggish growth, but producing finely formed rich scarlet blooms. A good rose; M—Very beautiful color, but a little weak in the stem. Forces well; W—One of the best.

Gloire des Polyantha. Poly. 1888. Guillot & fils. Large well-formed flowers, rosy pink in color; an improvement over Mignonette. H—Supersedes all of the pink polyanthas; much superior to Mignonette.

Gloire des Rosomanes. B. Vibert. Brilliant crimson, semi-double. H—Pretty much out of cultivation, too single.

Gloire de Vitry. H. R. 1855. Masson. Bright rose. W—Superseded.

Gloire Lyonnaise. H. R. 1884. Guillot fils. Creamy white, shading to lemon at the center (the so-called "Yellow H. R."). A grand variety, very double; petals large, and of heavy texture, of beautiful form, glossy leather-like foliage. H—A valuable and distinct variety of exceptional merit; W—Beautiful, but would be better if more double.

Glory of Cheshunt. H. R. 1880. G. Paul. Rich crimson, double, and very effective. H—A variety of much merit for garden cultivation; W—Very fine, variable.

Glory of Mosses. M. 1852. Vibert. Pale rose, large, full, flat; foliage very large. H—An old and tried variety. Valuable.

Glory of Waltham. H. Cl. 1865. W. Paul. Crimson, double, fragrant. W—Very vigorous, large, and double; a good rose for general planting.

Golden Fairy. Poly. 1889. Bennett. Blooms in clusters of forty or fifty small, beautiful yellow flowers. H—Too small; lacks substance.

Golden Gate. Tea. 1891. Dingee & Conard. Buds of Niphetos form, creamy white center and base of petals golden yellow, sometimes tinted rose. M—Beautiful, but not reliable; W—Free grower, good bedder.

Goubault. Tea. 1843. Goubault. Rose tinged salmon; similar to Bon Silene, but inferior to it. H—Its days of usefulness are past; very similar to Bon Silene.

Grace Darling. Tea. 1885. Bennett. Creamy white, very broadly bordered in rosy peach; double and of heavy texture; one of the finest of the teas. H—One of the finest of all the everbloomers. This rose is classed as a tea, but a casual glance shows it to be a hybrid tea; W—One of the most beautiful of the teas, but uncertain out of doors in this section.

Grand Mogul. H. R. 1887. Wm. Paul. Deep velvety purple; large, full, and fine. W—Generally good.

Greville (*Seven Sisters*). Mult. Blush, tinged and striped with various shades. Small or medium. Tender. H—A very unsatisfactory rose on account of its tendency to push into growth before spring frosts are past; it invariably loses its buds and growth.

AMERICAN BEAUTY ROSES. SHOWING THE WIDE DIFFERENCE IN QUALITY OF FLOWERS SENT TO THE WHOLESALER.

Gustave Nadaud. Tea. 1890. Soupert & Notting. Large, double and cupped. H—A copper-colored variety of no special value; M—Not reliable.

Gustave Piganeau. H. R. 1889. Pernet & Ducher. Brilliant crimson of even shade; of extraordinary size; full, and of most beautiful form; a grand rose. H—The finest introduction among H. R's. of recent years. It has all the requisites of a first-class variety: viz. size, form, freedom and good leafage; W—Beautiful, lacks vigor.

Gustave Regio. H. T. 1891. Pernet & Ducher. Flower large, semi-double, canary yellow, center saffron yellow; petals bordered with carmine. H—Of no value, too single; lacks substance; M—Not reliable.

Harrison Weir. H. R. 1879. Turner. Velvety crimson lightened scarlet. W—Good, not very reliable.

Harrison's Yellow. A. 1830. Harrison. Golden yellow, semi-double, of medium size. Freer than Persian yellow. H—A very valuable garden variety.

Heinrich Schultheis. H. R. 1882. Bennett. Very large, very double, of fine form; co'or delicate rose; fragrant. H—supposed to be valuable for early forcing. Does not grow well out of doors in America; M—Very fair variety for early forcing; W—One of the best.

Helvetia. Tea. 1873. Ducher. Pink, tinged fawn. H—Superseded.

Henri Brichard. H. T. 1891. Bonnaire. Flower large and very double. Outer color pure white, interior bright rosy carmine. H—Valuable on account of its unique coloring.

Henri Meynadier. Tea. 1885. Nabonnand. Large and double, fine rose color. H—A large double pink tea, good for bedding; W—Good grower, fine bedder.

Henry M. Stanley. Tea. 1891. Dingee & Conard. Clear pink, sometimes tinged salmon, free in bloom, full and fragrant. M—Not satisfactory as a forcing rose; W—Good bedder.

Henriette de Beauveau. Cl. T. 1887. Lacharme. Bright clear yellow, large and fine; free; fragrant. H—Of Dijon parentage, one of the best of its type.

Her Majesty. H. R. 1886. Bennett. Clear, bright satin rose; very large and full. One of the finest of the H. R's., in England; does not thrive in this country. H—Produces fine flowers when well established, when perfect the finest of the light H. R's.; W—Very large, worthless here, but succeeds in the south or Pacific coast.

Hermosa (*Armosa*). B. 1840. Marchesean. Bright rose, medium or small; hardy. Continually in bloom; not full; very popular. H—Grown by the thousands for pot culture for market purposes

It thrives where others fail; fine for massing; W—General favorite, splendid bedder.

Hippolyte Jamain. H. R. 1874. Lacharme. Carmine red; flower well built; hardiest of the V. Verdier type. H—Does not thrive on its own roots, fine when grafted; W—One of the best of the V. Verdier type.

Homer. Tea. 1859. Moreau-Robert. Salmon rose, mottled; free; beautiful in bud, a fine bedder. H—Still esteemed by many, buds too short and stubby. M—A very lovely rose, but will not force well; W—Good bedder.

Hon. Edith Gifford. Tea. 1882. Guillot fils. Flesh white with lovely shadings of cream and pink. H—An ideal bedder, a most beautiful variety.

Horace Vernet. H. R. 1866. Guillot fils. Crimson lightened with scarlet; large and double. H—Too weak in growth, but grand in color.

Imperatrice Eugenie. Bengal. 1855. Beluze. Silvery rose, medium size; full, fragrant; subject to mildew. H—A weedy thing, no value.

Imperatrice Marie Feodorowna de Russie. Tea. 1884. Nabonnand. Flower very large and imbricated, quite double; yellowish marbled in rose. M—No good.

Innocente Pirola. Tea. 1878. Mme. Ducher. Clouded white, of medium size, in the style of Niphetos; but inferior in all points except its extra vigor in growth. H—Very popular in England, but does not meet the requirements of a good rose here; M—No good.

Isabella Gray. N. 1854. A. Gray. Golden yellow. Has both good and bad qualities of its parent, Cloth of Gold. H—Too shy.

Isabella Sprunt. Tea. 1865. Rev. Jas. Sprunt, D. D. A sport from Safrano, sulphur yellow, beautiful in bud. M—Very beautiful color, but superseded; W—Fine bedder.

Isabelle Nabonnand. Tea. 1874. Nabonnand. Very large double flower of heavy texture, tender rose-chamois, center silvery; fragrant. M—No good.

Jacques Lafitte. H. R. 1846. Vibert. Rosy crimson. W—Good, Jules Margottin type.

James Brownlow. H. R. 1889. A. Dickson & Sons. Brilliant carmine, large and full. H—This ought to be styled a crimson Baroness Rothschild from its resemblance to this noted sort. Scentless.

James Sprunt. Beng. 1858. Rev. Jas. Sprunt. A climbing sport from Agrippina. Same color as the parent, flowers larger and fuller. H—This should be useful in parts of the country for screens and porches.

James Veitch. P. M. 1865. E. Verdier. Violet crimson, poor color; poor shape; mildews badly. H—A high-colored moss, but a very poor grower.

J. B. Varrone. Tea. 1890. Guillot & fils. Large and double; bright changeable china rose, often deep carmine and yellow. H—A grand rose, both in its coloring, freedom of bloom, and vigorous growth; M—No good; W—Buds beautiful, petals a little tender, but free bloomer and good bedder.

Jean Ducher. Tea. 1874. Mme. Ducher. Bronzed rose, large, very full, globular. H—A rose of uncertain quality; M—No good.

Jean Lambert. H. R. 1866. E. Verdier. Deep red, very large, full and flat. H—A medium sized rose. Fairly good.

Jean Liabaud. H. R. 1875. Liabaud. Deep crimson maroon, very dark and beautiful; lightened with touches of scarlet. H—One of the best of all the dark hardy roses; W—One of the best dark roses.

Jean Pernet. Tea. 1867. Pernet. Light yellow, suffused salmon; a fine tea, but surpassed by Perle des Jardins. H—Superseded by Perle des Jardins; M—No good; W—Not as rich in color as Perle des Jardins, but better for outside bedding.

Jean Sisley. H. T. 1879. Bennett. Lilac rose, large and full; not fragrant; subject to mildew. worthless. H—Surpassed by many other varieties in same line of color.

Jean Soupert. H. R. 1875. Lacharme. Crimson maroon; in the way of Jean Liabaud. H—A grand dark variety, but not so good in growth as Jean Liabaud.

Jeanne Abel. Tea. 1882. Guillot fils. Tender rose, brighter at the center; large, double, and globular. H—Superseded by J. B. Varrone.

Jeanne Guillaumez. Tea. 1890. Bonnaire. Deep yellow with apricot center; large, full, and globular. H—Color of Sunset, but not so fine in shape.

Jeannie Dickson. H. R. 1891. Dickson & Son. Satin rose, base of the petals yellow; flowers large and full. H—A fine rose of excellent quality.

John Bright. H. R. 1878. G. Paul. Bright crimson of medium size. H—Poor growth; worthless; W—Fairly good.

John Hopper. H. R. 1862. Ward. Bright rose, carmine center, large and full, semi-globular; a standard variety. H—Good for out-door planting. Not free after first crop; W—One of the best of its color.

John Stuart Mill. 1874. Turner. Rosy crimson, large, full and double. W—Good reliable variety.

Jules Chretien. H. R. 1878. Schwartz. Crimson tinged purple; of Prince Camille type. H—Good color, poor growth; W—Fine rose, but poor grower.

Jules Finger. Tea, 1875. Mme. Ducher. Red with silver luster. Does finely worked on a good stock. No value on its own roots; M—Beautiful, but uncertain; W—Good for bedding.

Jules Lemaitre. H. R. 1891. Vigerron. Large, double and globular; bright rosy carmine. W—Good rose, straggling grower.

Jules Margottin. H. R. 1853. Margottin. Carmine rose, large and full; somewhat flat; free and hardy. H—A good old rose, but there are many superior to it; W—Good old variety.

Kaiserin Augusta Victoria. H. T. 1891. Lambert & Reiter. Pure white with yellow center. Very free. A most promising variety, having the form of C. Mermet. H—An ideal hybrid tea of strong growth, great freedom in flowering, and good-sized bloom. Prediction is made that this will be one of the very best and finest of all the light roses for spring, summer, and early fall—when grown under glass. It will never supersede The Bride for winter forcing, for the following reasons: It does not take on the finish and chaste appearance essential to compete successfully with the Bride during winter. The color is not as pure as the Bride, and suffers when contrasted with it. This is a good rose, and a great addition to the list of varieties for cutting purposes. It may be possible to grow it as well in winter as in fall and spring; if so it will take first rank with the finer forcing varieties. Good for pot culture, and fine for out-door purposes; M—Extra fine, particularly for summer blooming, with delightful odor.

Kaiserin Augusta. Tea. 1872. Elze. Clear yellow, large, full, vigorous; of Gloire de Dijon race. H—A German variety of Dijon family. Beautiful color.

Kronprinzessin Victoria. Bour. 1888. L. Spæt. Large, full, of heavy texture; milk white shading to a deep creamy center; one of the most beautiful of roses. Sport from Souv. de la Malmaison. H—This is a creamy yellow form of Malmaison, useful for out-door culture, and in every way worthy of being used where Malmaison is desirable; W—Improved Malmaison.

La Brilliante. H. R. 1862. V. Verdier. Clear bright crimson, large, double and fragrant. Free. H—As its name indicates, a most brilliant and striking color, but too shy in bloom for extended culture.

L'Elegante. Tea. 1883. Guillot fils. Very large, china rose shading to clear bright rose. H—Pretty, but of too weak growth; flowers small.

La France. H. T. 1867. Guillot fils. Silvery rose, changing to pink; very large, full, and globular; constant in bloom; the most fragrant among roses. A leading forcing variety. H—Everyone loves the odor of this rose. Exquisite in its coloring when fresh cut. Desirable for forcing, and used extensively for this purpose. Not a good shipping rose on account of its tendency to turn purple when packed. Many of the larger growers have dropped it from their lists on this account. Where it can be cut and used on the same day nothing can be finer for selling over the counter. It likes an open mellow loam; if a little sand be in it so much the better. La France and Albany as well are inclined to have a disfigurement of the leaf—a diseased condition undoubtedly—that is commonly termed scald. Whilst it detracts much from the appearance of the plant still it does not seriously impair its producing qualities. If this variety suffers seriously from overfeeding, too much water, or a sour soil, black spot invariably makes its appearance. Great care should be exercised in watering this and all the La France type, during November and December. A temperature of 58° suits this variety. M—One of the most valuable of all the H. T. class, either for forcing or bedding.

La France de 1890, H. T. 1890. Moreau—Robert. Very long in bud and large in bloom. Very bright red; not perpetual. H—A distinct and novel semi-climbing rose of good form and color. Partakes more of the H. R. character than H. T. Ought to be a useful rose for outdoor purposes.

L'Ideal. N. 1888. Nabonnand. Of metallic golden-red; streaked and tinted golden yellow. H—In the way of W. A. Richardson, but higher colored.

La Jonquille. Tea. 1871. Ducher. Jonquil yellow, semi-double, sometimes single; medium or small in size. H—Too small; unique in color however; M—No good.

La Lune. Tea. 1878. Nabonnand. Creamy yellow, deepening toward the center; large petals; medium sized. H—A good pot rose; should be better known in America.

La Nuancee. Tea. 1875. Guillot fils. Blush tinged with fawn; full and of medium size. H—Superseded.

La Princesse Vera. Tea. 1878. Nabonnand. Flesh bordered coppery rose; full; well formed. H—A good rose, but there are others better in the same line of color; M—No good.

La Reine. H. R. 1839. Laffay. Glossy rose, large and full; half globular, very hardy. A standard sort. H—A garden rose of very unsatisfactory character. Buds scald and refuse to open; W—Fine old reliable variety.

METEOR ROSES. SHOWING THE WIDE DIFFERENCE IN QUALITY OF FLOWERS SENT TO THE WHOLESALER.

La Rosiere. H. R. 1874. Damaizin. Crimson, of the type of Prince Camille. Quite free and of excellent habit. M—Good forcing variety; W—Resembles Prince Camille.

Lady Arthur Hill. H. R. 1890. Dickson & Son. Large and double. Tender silvery rose. H—A very distinct and promising rose.

Lady Castlereagh. Tea. 1888. Dickson & Son. Pale flesh, shading to salmon. Very large open flower. H—A large, open, coarse rose. Does well in the border.

Lady Emily Peel. H. N. 1862. Lacharme. White tinged with blush. H—Superior to Coquette des Blanches; W—Good.

Lady Helen Stewart. H. R. 1887. A. Dickson & Sons. Bright crimson, shaded scarlet. W—Good, should be more generally planted.

Lady Henri Grosvener. H. T. H—A hybrid tea of exceptional freedom of bloom, medium-sized buds. No account for forcing, but good for outdoor purposes and for pot culture.

Lady Mary Fitzwilliam. H. T. 1882. Bennett. Flower enormous and nearly globular; color, delicate flesh pink, exquisite, but a poor grower in this country. H—The very acme of perfection in Europe. So subject to black spot in this country as to be practically useless.

Lady Zoe Brougham. Tea. 1886. Nabonnand. Brilliant fawny yellow; large, full, and of fine shape; a good summer bedder. H—Rather small, but valuable on account of its coloring.

Lamarque. N. 1830. Marechal. White, with sulphur center; very large, full, somewhat fragrant, a superb climber. H—Useful for rafters in greenhouses. Valuable in the south as a climber; M—A grand climber for greenhouse.

Lamarque Jaune. N. 1871. Ducher. Pale yellow; inferior to the former in all respects. H—Useless; many yellow climbers in every way superior.

Le Mont Blanc. Tea. 1869. Ducher. Pale lemon yellow; good in the bud. H—Superseded.

Le Nankin. Tea. 1871. Ducher. Pale yellow; shaded copper yellow. H—Unique in color, defective in form. M—No good.

Leopold Premier. H. R. 1863. Vanassche. Jacqueminot type, deep red. W—Fine, sometimes fails to open.

Le Pactole. Tea. Mme. Pean. Pale yellow, beautiful buds. H—Distanced by others; M—Not reliable.

Letty Coles. Tea. 1876. Keynes. White, with pink center; a grand sport from Mme. Willermoz. H—One of the indespensable roses. Splendid in color; not suitable for forcing, but good for general purposes; M—For bedding only; W—Very large leaves and flowers, changeable.

Lion des Combats. H. R. 1851. Lartay. Violet rose, double, subject to mildew. W—Superseded.

Lord Raglan. H. R. 1854. Guillot pere. Burgundy crimson, a lovely shade. H—Old variety, superseded; W—Rich color, rather shy.

Louis Dore. H. R. 1878. Fontaine. Red, large and full; of nice bushy growth. H—Superseded by Ulrich Brunner.

Louis Van Houtte. H. R. 1869. Lacharme. Crimson maroon, full and half globular; one of the very finest crimsons. H—Does poorly on its own roots; fine when budded; W—One of the finest.

Louise Odier. B. 1851. Margottin. Bright rose, of medium size; full, well-formed, and hardy. H—At one time a great favorite; has lost caste.

Luciole. Tea. 1886. Guillot. Bright carmine rose, tinted with saffron yellow; base of petals coppery; buds very long and beautiful. H—A fine rose, valuable on account of its coloring; M—Beautiful, but not reliable; W—Flowers very changeable, buds large, beautiful petals, thin; a good bedder in favorable locations.

Ma Capucine. Tea. 1871. Levet. Nasturtium yellow, beautiful buds; a very distinct rose, but of very delicate habit. H—Striking color, useless; M—The most beautiful color of any known rose; forces well in cool house.

Ma Paquerette. Poly. 1875. Guillot. Pure white, small and double. H—Pretty, but not as good in its class as Little Pet.

Mabel Morrison. H. R. 1878. Broughton. A sport from Baroness Rothschild. Flesh white, changing to pure white, semi-double and beautifully cupped. H—A distinct and beautiful rose. Used for forcing; M—The best white H. R. for forcing yet introduced, very free blooming; W—Fine, but not as good as White Baroness.

Mme. Agathe Nabonnand. Tea. 1886. Nabonnand. Large, rounded and full; flesh color, with brighter margin; fragrant. W—This has proved to be one of the best bedding roses we have.

Mme. Alfred Carriere. H. N. 1879. Schwartz. White, not free in bloom. H—Not so good as Coquette des Alpes. Same type.

Mme. Alfred de Rougemont. H. N. 1862. Lacharme. White, tinged with pink. H—Inferior to others of the hybrid Noisette type.

Mme. Alice Dureau. H. R. 1868. Vigneron. Rose color, of the La Reine type. H—Excelled by many.

Mme. Andre Duron. H. T. 1889. Bonnaire. Fresh clear red, recurving petals; of large size. H—Lacks vigor.

Mme. Angelique Veysset. H. T. 1891. Veysset. Promises extremely well; a nicely striped La France. H—Odd, no permanent value.

Mme. Angele Jacquier. Tea. 1879. Guillot fils. Bright rose, base of petals coppery yellow; of the general form of C. Mermet. H—Superseded; M—One of the most beautiful roses ever introduced, but does not force well in mid-winter; very large; W—Not so fine as Mme. Pierre Guillot.

Mme. A. Schwaller. H. T. 1886. Bernaix. Rosy flesh; beautifully cupped; very free. H—A good rose for pot culture.

Mme. Azelie Imbert. Tea. 1870. Levet. Pale yellow; raised from Mme. Falcot. H—Stems too weak, small flowers; M—No good; W—Fine bedder, but not always good in this locality; this type is inclined to be a little tender.

Mme. Baron Veillard. Bour. 1890. Vigneron fils. Flowers large, double, and cupped; silvery lilac-rose. Very free. H—Dull in color, no particular value.

Mme. Barthelemy Levet. Tea. 1879. Levet. Canary yellow, of medium size. H—Dijon seedling, inferior to others of the type; M—No good; W—Straggling grower, foliage tender.

Mme. Berard. Cl. T. 1870. Levet. Similar to the parent, Gloire de Dijon; not quite so full; of fresher color, finer in bud. H—The best of all the climbing teas.

Mme. Bravy, (*Alba Rosea; Mme. Sertot*). Tea. 1848. Guillot of Pont Cherin. Creamy white, large, full, and fragrant. One of the most beautiful and useful of teas. H—Not so good as Marie Guillot; mildews easily; W—A fine rose, but somewhat tender.

Mme. Camille. Tea. 1871. Guillot fils. Mushroom color; large and coarse. H—Off color, washy; M—Large, only good for bedding; W—Color not always clear, but one of the most reliable for bedding; very vigorous.

Mme. Caroline Testout. H. T. 1891. Pernet-Ducher. Flowers large, double, and globular; clear satiny rose, center brighter; very fragrant. H—A most attractive and pleasing pink color. Nothing in pink roses quite so captivating as the soft satin sheen of Testout. It has good points beside color; it is free in bloom, strong in growth, fine foliage, good size. Its weak points are a tendency to droop caused by a too weak flower stem, hardly double enough, lacks somewhat in tissue. Its good qualities, however, outnumber its poor ones. The ladies universally take to the color. It forces well, making strong shoots covered with coarse spines. It succeeds, with the same treatment as La France, and is subject to black spot, especially if cut or pruned too hard in fall or early winter. To florists seeking a new color in roses, this variety is well worth giving a trial; M—Very fine pink color, extra large, forces well, blooming very freely, (A 1).

Mme. Cecile Berthod. Tea. 1871. Guillot fils. Bright sulphur yellow, large and full. H—Striking foliage, but long since excelled by others. Too small.

Mme. Celina Noirey. Tea. 1868. Guillot fils. Salmon, outer petals of faded pink; very large and full, but coarse. H—Poor in color, not valuable.

Mme. Chas. Crapelet. H. R. 1859. Fontaine. Cherry red, medium or large; fragrant and good. H—A fine, full, round flower. Good garden variety; W—Resembles La Reine.

Mme. Chas. Wood. H. R. 1861. E. Verdier. Reddish crimson, large, and nearly full. One of the freest in bloom, but not all the flowers perfect. H—This is the hardy rose par excellent for American gardens. A most useful rose. If Dinsmore be different it cannot be detected; W—The best blooming H. R., requires high culture.

Mme. Chauvry. Cl. T. 1886. Bonnaire. Nankin yellow, reverse of petals china rose. Large and very beautiful. H—Useless.

Mme. Chedane Guinoiseau. Tea. 1880. Leveque. Canary yellow; somewhat in the style of Isabella Sprunt. H—One bloom out of forty or fifty will come excellent in form and very large; balance of flowers of no particular value. Discarded by many.

Mme. Chirard. H. R. 1867. Pernet. Rose, tinged vermilion, full and fragrant. H—Too shy.

Mme. Clemence Joigneaux. H. R. 1861. Liabaud. Rose, tinged with lilac; large and double. H—No particular value.

Mme. Cusin. Tea. 1881. Guillot fils. Rosy crimson, with touches of violet and yellow; a popular forcing variety. H—In a soil congenial to its growth, this is one of the most prolific and prettily colored of all the forcing roses. This rose has given unsatisfactory results except in a few isolated instances. As grown at Hoboken it is all that could be desired, both in color and quantity of flowers produced. It appears to make good growth in most places, but comes without the bright tints and markings which make the rose valuable. Charcoal dust has a very distinct and direct influence on the color of roses when used with the soil, it might be well to try this where the rose has failed to color properly; 58° is considered the best temperature for it; W—Good for forcing, also a good bedder.

Mme. Damaizin. Tea. 1858. Damaizin. Creamy white, shaded salmon, large and double; not well formed. H—An old garden favorite, others better.

Mme de la Collogne. H. T. 1890. Levet pere. Bright rose, very large, double, and of perfect form. H—Useless, and without sufficient merit.

Mme. de St. Joseph. Tea. Fawn shaded salmon, large, full, and fragrant; not well formed. W—Nice bedder.

Mme. de St. Pulgent. H. R. 1871. Gautreau. Rosy vermilion tinged lilac; large, globular and well-formed. H—Not free enough to be retained.

Mme. de Tartas. Tea. Bernede. Rose color; double. H—Superseded.

Mme. de Vatry. Tea. 1855. Guerin. Red shaded salmon; of good form both in bud and flower; a choice old sort. H—Souvenir de Wootton is superior in every way; W—Fine in bud, good for bedding.

Mme. de Watteville. Tea. 1883. Guillot fils. Large, double, of fine form and fragrant; general color creamy white, bordered with bright rose; a grand forcing variety. H—A profitable forcing rose, where its requirements are met in the soil. Failure has attended its planting in many places. It is naturally a strong vigorous grower, and a little inclined to run to growth. The only rule for success is to try different soils until the right kind is found. It may be that potash, lime, charcoal, or some other ingredient would give satisfactory results; W—Good for forcing, also one of the best for bedding.

Mme. Denis. Tea. 1853. Guillot. Flowers medium to large, very double; color white, shaded salmon. H—Superseded long ago.

Mme. Desir. H. R. 1886. Pernet pere. Bright rose shaded salmon and cream; large and nearly full, fragrant. H—A desirable new color among H. Rs.

Mme. Dubroca. Tea. 1882. Nabonnand. Large, full, well formed and of heavy texture; tender rose, clear yellow at the base of the petals. H—A novel colored rose; W—Good bedder.

Mme. Edouard Ory. M. Moreau-Robert. Bright rosy carmine, of medium size and globular. One of the best mosses. H—One of the best of all the so called perpetual mosses.

Mme. Elie Lambert. Tea. 1891. Elie Lambert. Globular and cupped; center rosy flesh, outer petals pure white. W—Fine habit, free bloomer, one of the best new roses. Fine bedder.

Mme. Etienne Levet. H. T. 1878. Levet. Cherry red, sometimes with coppery tinge; of small size and pretty in bud. H—Too small to be useful. Slight in growth also.

Mme. Eugene Verdier. H. R. 1878. E. Verdier. Mottled rose, very large, of La Reine type; very large, full and globular. H—A great improvement over La Reine; W—Fine large flower, good.

Mme. Falcot. Tea. 1858. Guillot fils. Deep apricot, somewhat resembling the parent Satrano, larger in bloom, but weaker in growth. H—A beautiful apricot color. Hardly up to the standard at present.

Mme. Francois Janin. Tea. 1872. Levet. Orange yellow, small size; exquisitely beautiful. H—Pretty, but too small.

Mme. Francois Pittet. H. N. 1877. Lacharme. Pure white, small. H—Not as good as Coquette des Blanches; too small; W—Not desirable.

Mme. Furtado. H. R. 1860. V. Verdier. Flowers very large, double and sweet; bright rosy carmine. H—Not valuable now; others better.

Mme. Gabriel Luizet. H. R. 1878. Liabaud. A grand pink of Jules Margottin type; of glistening texture; much used for forcing. H—An ideal hybrid for forcing purposes. Color, form and size considered nearly right. A strong vigorous grower; W—Probably the finest rose of its color.

Mme. Georges Bruant. Hyb. Rugosa. 1888. Bruant. A cross between the single Rugosa and Sombreuil; immense semi-double flowers of glistening white; deliciously fragrant; brings clusters of long pointed buds. A beautiful rose for the lawn. H—A valuable shrub for the garden. Flowers soil and fade easily, but it is the forerunner no doubt of the Hybrid Rugosas.

Mme. George Schwartz. H. R. 1871. Schwartz. Silvery rose, fades badly; coarse. H—No good on its own roots.

Mme. Gustave Bonnett. H. N. 1860. Lacharme. White tinged with pink; not so good as some others of this class. H—Too small, inferior to others of this class.

Mme. Hippolyte Jamain. Tea. 1869. Guillot fils. White, tinged in the center with yellow, large, full. H—A good rose for pot culture.

Mme. Hippolyte Jamain. H. R. 1871. Garcon. White, tinged with rose, very large and full. H—Does not flower freely, not worth culture.

Mme. Hoste. Tea. 1888. Guillot & fils. Yellowish white, often canary yellow; base of petals often amber colored. Grand in form and heavy in texture; one of the finest forcing varieties. H—This variety thrives when forced in a stiff heavy clay loam. Nothing can be much finer than this rose during the winter months where the soil suits. In spring and summer it takes on a dark creamy tinge suggestive of age and decline; that is its weak point as a forcing variety. During winter, and as remarked before, where the soil is suitable nothing produces equal to this rose; 60° suits this rose best. It is free growing, fine in form and there is certainly room and a place for this favorite; W—A beautiful rose for forcing, but not as good for bedding; foliage is rather tender; must have well drained soil and shelter from wind.

THREE LA FRANCE. FOUR MAGNA CHARTA

ROSES. SHOWING WIDE DIFFERENCE IN QUALITY OF FLOWERS SENT TO THE WHOLESALER.

Mme. Isaac Pereire. Bour. 1880. Margottin fils. Carmine red, large, full and free. H—A grand hardy garden rose; one of the best when established.

Mme. Jean Sisley. Beug. 1884. Dubreuil. Flower double; a beautiful white; of cup form. A fine pot variety. W—Good bedder.

Mme. Joseph Desbois. H. R. 1886. Guillot. Flesh white, center delicate pink; very large and full. H—A free growing rose of Baroness or Merveille de Lyon type; grand flowers; forces like Luizet.

Mme. Joseph Godier. Tea. 1888. Pernet fils-Ducher. China rose, center carmine shaded with coppery yellow. M—No good.

Mme. Joseph Halphen. Tea. 1859. Margottin. Blush of medium size. H—Others have distanced it.

Mme. Joseph Schwartz. Tea. 1880. Schwartz. Blush, edges of petals tinged carmine. H—A white Countess de Labarthe; valuable for pots and bedding; M—Grand as a bedder only; W—A white Brabant, free bloomer, good bedder.

Mme. Jules Cambon. Tea. 1889. Bernaix. Flowers of medium size, double, rosy flesh with magenta shadings. H—In the way of Christine de Noue, but not so good.

Mme. Jules Margottin. Tea. 1871. Levet. Carmine pink, tinged lilac, very fragrant. H—A little undersized, but still very pretty and useful on account of its rich coloring; M—No good.

Mme. Julie Weidmann. H. T. 1880. Soupert & Notting. Flowers large and double; petals large; color silvery salmon rose; very free. H—Worthless.

Mme. Knorr. H. R. 1855. V. Verdier. Rose color, medium size, full, flat and very sweet. H—A fine old rose of good form; blooms but once a year.

Mme. Lacharme. H. Ch. 1872. Lacharme. White tinged with pink; medium sized, full and globular; hardy. H—No use in America.

Mme. la Comtesse de Panisse. Tea. 1878. Nabonnand. Large, double and imbricated; light clear pink with touches of yellow and carmine. H—A good rose for open ground where hardy.

Mme. Lambard. Tea. 1877. Lacharme. Rosy salmon, deepening toward the center; color variable; large, full and very good. A most useful variety. H—Occasional blooms very fine; a little uncertain, however; M—Not reliable; W—A good vigorous grower; not such a free bloomer as most teas, but a fine bedder.

Mme. Loeben Sels. H. T. 1879. Soupert & Notting. Silvery white, shaded rose, large, full and somewhat flat. H—Not worth cultivating.

Mme. Macker. H. R. 1863. Damaizin. Large and double, color clear rose. H—A very promising garden variety.

Mme. Magonette. Tea. 1889. Soupert & Notting. Magenta red with odd shadings of yellow. H—Worthless.

Mme. Margottin. Tea. 1866. Guillot fils. Citron yellow, coppery center, large and full; many flowers malformed. H—Worth growing, but it has serious faults; gives best results with high cultivation. M—Good bedder only; W—Flowers sometimes imperfect; succeeds well outside in warm seasons; with careful cultivation a beautiful bedder.

Mme. Marie Bianchi. 1881. Guillot fils. Blush, tinged lilac, fragrant. H—A good blush hybrid Noisette; W—Better under glass than outside; a poor grower.

Mme. Marie Finger. H. R. 1873. Rambaux. Almost identical with Eugenie Verdier. H—Dirty color, no particular value.

Mme. Marthe Du Bourg. Tea. 1889. Bernaix. Large and full, when opened nicely cupped. Pearl white with heliotrope pink center, rounded in form, fine. H—A very pretty and valuable rose for pot culture.

Mme. Maurice Kuppenheim. Tea. 1877. Mme. Ducher. Pale yellow, shaded apricot. H—Worthy of growth; a distinct long pointed bud.

Mme. Max Singer. Tea. 1884. Max Singer. Color rosy yellow, bordered with crimson, reverse rosy white. H—An open flat flower; no special merit.

Mme. Melanie Willermoz. Tea. 1845. Lacharme. Creamy white, thick petals, large and full. H—One of the finest of all the light tea roses; should be more extensively grown. Mme. Denis has been distributed largely under misapprehension in this country for Willermoz. Good for pots and a fine rose every way; W—Very large, a grand old variety for bedding.

Mme. Montet. H. R. 1880. Liabaud. Light pink, large petals. H—Good for pots, does well forced.

Mme. Moreau. P. M. 1872. Moreau-Robert. H—One of the best light roses in its section—moss.

Mme. Nabonnand. Tea. 1877. Nabonnand. Very large, double and of good form, flesh white, shaded rose. H—A good bedding variety; M—No good.

Mme. Nachury. H. R. 1873. Damaizin. Deep rose color, very large and fragrant, of La Reine type. H—Superseded. W—Fine large rose.

Mme. Olga. Tea. 1890. Leveque. Flower large and of good form; beautiful white with shadings. H—The growth of Cornelia Cook with medium sized flowers, a good all round rose; M—No good; W—Large, pure white, petals of good substance (a white Bougere).

Mme. Oswald de Kerchove. H. N. 1879. Schwartz. White, tinged fawn, of Eliza Boelle type. H—A good, dwarf, free-blooming rose after the style of Eliza Boelle.

Mme. Pauline Labonte. Tea. 1852. Pradel. Salmon rose, large and full, an excellent variety. H—Out of the race; M—For bedding only.

Mme. Philippe Kuntz. Tea. Bernaix. Flower erect, large and double, cherry red passing to salmon. H—Disappointing, not worthy of culture; M—No good; W—Flowers large, double, strong grower, good bedder.

Mme. Pierre Guillot. Tea. 1888. Guillot. Color coppery orange at the base of petal, body of petal cream color, beautifully banded with carmine pink. H—Has been tried extensively for forcing purposes with unsatisfactory results. It does not perfect its flowers in December and the two following months. Crimped petals, with a greenish tinge, seems to be a feature of the buds produced at time mentioned. It does nicely, however, in spring and early autumn. Good for pots in spring. M—Lovely color, forces well, but does not open regular in midwinter; W—Probably the richest colored tea rose in cultivation, a fine bedder, but requires extra good culture.

Mme. Plantier. H. Ch. 1835. Plantier. Pure white, above medium size, full and flat, one of the best for massing. H—Too well known to need comment.

Mme. Rebatel. H. R. 1885. Liabaud. Bright rose shading to pale rose, large and full. H—Absolutely worthless.

Mme. Scipion Cochet. H. R. 1871. Cochet. Cherry rose. H—A useful garden variety.

Mme. Sophie Fropot. H. R. 1876. Levet. Bright rose, not first rate. W—Not desirable.

Mme. Soupert. Moss. 1851. Moreau-Robert. Flower small and double, of rosette form, bright cherry red, very mossy. H—A pretty moss, but a very weak grower.

Mme. Susanne Blanchet. Tea. 1885. Nabonnand. Rosy blush, very large, free, a fine variety. H—Superior to others of its color; M—No good; W—A fine bedder.

Mme. Trifle. Cl. T. 1869. Levet. Fawn and yellow, a seedling from Gloire de Dijon. H—No particular value.

Mme. Trotter. H. Ch. 1855. Granger. Bright red of medium size, free. H—Obsolete.

Mme. Victor Verdier. H. R. 1863. E. Verdier. Carmine crimson, large, full, fine and globular, very fragrant, superb. H—A good rose of high color.

Mme. Vidot. H. R. 1854. E. Verdier. Flesh color, full and well formed, beautiful, of delicate constitution. H—Cannot be dispensed with.

Mme. Welche. Tea. 1878. Mme. Ducher. Pale yellow, center coppery, large and full, distinct. H—A superb rose for beds or pots, a standard in its class; M—Good for bedding purposes only; W—Great substance, foliage very firm, one of the best for bedding.

Mme. Wm. Paul. M. 1869. Moreau-Robert. Very large, double and globular. Bright rose or clear red. H—An excellent free-flowering moss.

Mlle. Bonnaire. H. N. 1859. Pernet. Closely resembles Mme. Nomann. H—Similar to Eliza Boelle, flower somewhat smaller.

Mlle. Brigitte Viollet. H. T. 1878. Levet. Silvery rose, slightly tinged lilac. H—Of no particular value.

Mlle. Cecile Berthod. Tea. 1871. Guillot fils. Sulphur yellow of medium size, pretty in bud. H—Pretty color, too small, superseded.

Mlle. Cecile Brunner. Poly. 1880. Mme. Ducher. Salmon pink, deeper in the center, very small and full, exquisite. H—Outlived its day and usefulness.

Mlle. Claudine Perreau. Tea. 1886. Lambert. Bright rose, sometimes paler, in the style of Souvenir d'un Ami. H—Lacks definiteness in color, not free enough; W—I fail to see much resemblance to Souv. d'un Ami, it seems to have a distinct habit of its own, a good bedder.

Mlle. Clementine Ribault. H. R. 1885. Ribault. Clear fresh red, large and full. H—A choice free-blooming rose of merit.

Mlle. Elizabeth Grammont. Tea. 1886. C. Levet, jeune. Bright rose, base of petals yellow, large and full. W—Good bedder.

Mlle. Lazarine Poizeau. Tea. 1876. Levet. Orange yellow, small, pretty in bud. H—Unique in color, a very pretty variety.

Mlle. Marie Cointet. H. R. 1872. Guillot fils. Salmon pink, opens badly, of V. Verdier type. H—A fine rose, but a most miserable grower.

Mlle. Marie Rady. H. R. 1865. Fontaine. Vermilion red, shaded crimson, large, full and of splendid form. H—A grand hardy rose, valuable.

Mlle. Rachel. Tea. 1860. Beluze. White, pointed buds, not equal to Niphetos. H—Superseded; M—Superseded.

Mlle. Susanna de Rodocanachi. H. R. 1884. Leveque. Large, double and globular, tender rose shading to white, a grand variety; H—One of the most valuable of all the section to which it belongs.

Mlle. Therese Levet. H. R. 1866. Levet. Salmon rose of medium size, free, of Jules Margottin type. H—A light grower when on its own roots, a good rose when worked.

Madeleine d'Aoust. Tea. 1890. Bernaix. Pale rosy flesh with nankin center coloring, very beautiful. H—A rose deserving of extensive culture on account of rich and peculiar coloring.

Magna Charta. H. Ch. 1876. Wm. Paul. Pink suffused carmine, large, full and globular, fragrant, excellent for forcing. H—Blooms but once a year, a good forcing rose, excellent for pots. M—Extra fine variety for very early forcing; W—One of the best and most healthy growers, good for forcing or bedding.

Malmaison Rouge. Bour. 1882. Gonod. A sport from Malmaison of velvety red color. H—A grand rose for bedding purposes; W—Flowers nearly always imperfect, not reliable.

Marechel Niel. 1864. Pradel. Deep yellow, very large, very full, globular and fragrant, the finest of all yellow roses. H—A popular climbing tea; M—The finest yellow rose yet introduced, forces well, but not a constant cropper, not so popular as formerly.

Marechal Robert. Tea. 1875. Mme. Ducher. White, with flesh pink center, large and full. H—Deserving of greater popularity, a valuable rose; W—A fine bedder.

Marechal Vaillant. H. R. 1861. Viennot. Crimson, large, full and of fine form, in the way of Maurice Bernardin, but not so good. H—A sturdy, vigorous hybrid, with good general qualities.

Margaret Dickson. H. R. 1891. A Dickson & Son. White, pale flesh center, large and of good substance. H—An excellent rose of the Rothschild type.

Marguerite de Fenelon. Tea. 1883. Nabonnand. H—Not very pronounced, others better; M—No good.

Marie Baumann. H. R. 1863. Baumann. Crimson vermillion, suffused carmine, large, full, of exquisite color and form, fragrant, a grand variety; H—A standard variety of unquestioned merit.

Marie Caroline de Sartoux. Tea. 1881. Nabonnand. Pure white, of exquisite form. H—Others better.

Marie d'Orleans. Tea. 1883. Nabonnand. Color very bright silvery rose, a continuous bloomer, excellent form. W—Fine buds, good bedder.

Marie Ducher. Tea. 1868. Salmon rose, large and full, free. H—Beds well; W—Good bedder.

Marie Guillot. Tea. 1874. Guillot fils. White, faintly tinged yellow, large, full and of splendid form, one of the most beautiful. H—The finest of all the white teas for summer bloom, good for pots, a typical florists' rose; M—Grand as a bedder or when summer flowers are in demand; W—Beautiful form, splendid bedder.

Marie Lambert. Tea. 1887. Lambert. Of medium size, more than semi-double, white (the "White Hermosa"). H—Does well massed in beds, aside from this its usefulness is limited; W—Free bloomer, called "White Hermosa" or "Snowflake," one of the finest bedders.

Marie Sisley. Tea. 1868. Guillot fils. Rose tinged salmon, distinct, but not reliable. H—Too small, shelved.

Marie Van Houtte. Tea. 1871. Ducher. Pale yellow, edges of petals often lined with rose, the very finest of the outdoor bedders. H—A good old standard, beds finely, too much inclined to run to wood for pot culture; M—Good for bedding purposes only; W—Has been called "Gem," one of the finest bedders.

Marquise de Castellane. H. R. 1869. Pernet. Carmine rose, bright and lasting, very large, very full, not fragrant. W—Fine free bloomer.

Marquise de Vivens. Tea. 1886. Dubreuilt. Of good size, moderately full, bright china rose and carmine. H—Too thin in petal, not specially desirable; M—Beautiful, but superseded.

Marshall P. Wilder. H. R. 1885. Ellwanger & Barry. Cherry rose mingled with carmine, a seedling of Gen. Jacqueminot, nearly globular, a grand variety. H—All that can be said in favor of Alfred Colomb applies equally to this rose; W—An improved Alfred Colomb.

Masterpiece. H. R. 1880. Wm. Paul. Rosy crimson, large, full and globular. H—A large, fine, full flower; W—Fine, but not reliable.

Mathilde Lenaerts. Cl. T. 1879. Levet. A rose colored seedling of Gloire de Dijon. H—Not valuable.

Maud Little. Tea. 1891. Dingee & Conard. Soft lustrous china rose. W—Good bedder.

Maurice Bernardin. H. R. 1861. Granger. Bright crimson, large and nearly full, free; a grand seedling of Gen. Jacqueminot. H—One of the best hybrids; W—One of the best old varieties.

Maurice Rouvier. Tea. 1891. Nabonnand. Extremely large and double, tender rose, shading to red. Very free. W—Fine grower, good bedder.

Medea. Tea. 1891. Wm. Paul & Son. Lemon yellow, canary yellow center; large and very full. H—A fine vigorous rose, producing a few model flowers with others too stubby and short petaled. Will bed well; M—Beautiful color, but a shy bloomer.

Merveille de Lyon. H. R. 1882. Pernet pere. Flower large, double and perfectly cupped, purest white; a seedling from Baroness Rothschild. H—The best white hybrid for forcing in pots or under glass; does not thrive in open ground; M—A grand variety for forcing; white

TWO HOSTES. TWO WOOTTONS. THREE MERMETS TWO BRIDES.

ROSES. SHOWING WIDE DIFFERENCE IN QUALITY OF FLOWERS SENT TO THE WHOLESALER.

flushed with pink; W—Not pure white as described; blush, a shade between Baroness Rothschild and Mabel Morrison; rather a better grower than Baroness.

Michael Saunders. H. T. 1879. Bennett. Deep bronzy rose of medium size, very full, finely formed. H—Fails to open its buds; of no value.

Mignonette. Poly. 1881. Guillot fils. Carmine pink flowers in immense clusters; perfectly hardy. The most useful of the polyanthas. H—Superseded by Gloire des Polyantha.

Miniature. Poly. 1885. Alegatiere. Very small flowers of blush white. H—Of no special value.

Miss Ethel Brownlow. Tea. 1888. Dickson. Large and full, salmon rose, base of the petal yellow. H—An overpraised rose, still it has good qualities; M—Not reliable.

Miss Hassard. H. R. 1875. Turner. Pink, large, full and fragrant. W—Good.

Miss Marston. Tea. 1890. Pries. Large and full, creamy white with bright rosy center. H—A promising bedding rose.

Miss Wenn. Tea. 1891. Guillot & fils. Large, double and well formed; beautiful china rose. H—Of no value whatever.

Monsieur Boncenne. H. R. 1864. Liabaud. Deep crimson, double, of medium size. W—Not so good as Jean Liaband.

M. Edmond de Biauzat. T. 1885. Levet. Peach color tinged salmon; very large, full and well shaped. W—Good bedder.

Monsieur E. Y. Teas. H. R. 1874. E. Verdier. Carmine crimson, large, full and globular, superb. H—One of the most popular varieties in Europe; good budded on Manetti, poor on its own roots; W—Good.

M. Fillion. H. R. 1876. Gonod. Carmine rose of V. Verdier type. W—One of the best of V. Verdier type.

M. Furtado. Tea. 1863. Laffay. Yellow, medium or small, very full; an excellent rose. W—Good for bedding.

Montplaisir. Tea. 1868. Guillot fils. Very large and double, salmon yellow, H—Superseded.

Mrs. Bosanquet. Beng. Mme. Pean. Rosy flesh, very free. H—Superseded; W—Good bedder.

Mrs. Geo. Dickson. H. R. 1885. Brilliant satin rose, large and double. W—Fine color, not double enough.

Mrs. Jas. Wilson. Tea. 1889. A. Dickson & Son. Lemon yellow, margined with rosy heliotrope. H—Nothing very special to commend it; M—No good.

Mrs. John Laing. H. R. 1887. Bennett. Soft pink, large and fine; first rate in every way. An excellent forcing variety. H—Useful for early forcing; good in pots, fine outdoors; one of the best of recent introductions; M—One of the very best forcing varieties ever introduced; very free flowering; W—One of the best for general planting or forcing.

Mrs. Paul. Bour. 1891. Paul & Son. Large open flower of camellia form, with bold thick petals; blush white with rosy peach shadings. H—A valuable rose of the Malmaison type.

Narcisse. (*Enfant de Lyon*). Tea. 1845. Yellow; an inferior M. Furtado. H—Superseded.

Niphetos. Tea. 1844, Bougere. White, tinged pale yellow, long, large buds; petals thick and durable. An exquisite variety under glass. H—Well known for its good qualities as a forcer, is termed a front-bench rose, indispensable where white flowers are wanted in quantity. To increase the size this rose may be profitably worked on any of the climbing tea or Noisette varieties; better results and larger and finer buds are had when thus grown. Niphetos will do well for three years when benched on its own roots, and it is a waste of time and strength to oust them every year, as is done with nearly all the other forcing varieties. Thrives in any good soil, temperature of 58° the best; M—Still a great favorite and a fine variety for forcing; very free blooming; W—Fine for forcing; not a good bedder in this section.

Olga Marix. H. N. 1873. Schwartz. Rosy flesh, changing to white. H—Equal to any of the hybrid Noisettes, its slight blush tinge lends an additional charm; W—Superseded.

Ophelia. Tea. 1873. Ducher. Yellowish white, medium sized, full. H—Of too greenish a tinge to be valuable.

Ophirie. N. 1844. Goubault. Nasturtium yellow suffused with coppery red, of medium size, double, a shy bloomer. H—Superseded.

Oscar II, Roi de Suede. H. R. Soupert & Notting. Large, double and of fine form, carmine shading to crimson with very dark shadings of reddish brown, fragrant. H—One of the darkest and finest roses grown.

Oxonian. H. R. 1875. Turner. Of V. Verdier type, rosy red, large and somewhat fragrant. W—Quite good.

Pæonia. H. R. 1855. Lacharme. Red, very large, full, fragrant and free, fine for the garden. H—Had its day; W—An old reliable free bloomer, very hardy and fragrant, form not good.

Papa Gontier. T. 1882. Nabonnand. Very bright rose or red, large, not double, form extra good, a first-class forcing variety. H—A rose easily grown and forced, drops its leaves if grown too warm, 52° to 54° plenty high enough for night temperature; succeeds best in turfy loam; when grown in above-mentioned temperature the buds color better than when grown warmer. Too single to be of use in summer when grown under glass, but this rose does nicely bedded in open ground and produces good buds. M—A grand free flowering rose, requires rather a cooler treatment than teas generally when grown under glass, a fine bedder; W—Good for forcing, also a good bedder.

Paul Neyron. H. R. 1869. Levet. Deep rose, large and full, somewhat fragrant, very free. The largest variety known, much used for forcing. H—A valuable rose; W—Very large, general favorite.

Paul Verdier. H. Ch. 1866. C. Verdier. Carmine red, large, globular, well built. W—One of the best.

Peach Blossom. H. R. 1874. W. Paul. Of Jules Margottin type, mottled pink, a

fine color, but many blooms imperfect. W—Fine, but uncertain.

Pearl Rivers. Tea. 1891. Dingee & Conard. Ivory white, delicately shaded and bordered in clear rose. Raised from Devoniensis and Mme. de Watteville. M—Not reliable; W—Good bedder with good culture.

Perfection de Montplaisir. Tea. 1871. Levet. Yellow; an improved Canary. H—Too small to be of use; mildews easily.

Perfection des Blanches. H. N. 1872. Schwartz. White; a good sort, but inferior to Coquette des Alpes. H—There are others of its class that are better in form and freer in bloom; W—Superseded.

Perle des Blanches. H. N. 1872. Lacharme. White; medium size in clusters; double and globular. H—Not as good as Coquette des Blanches; W—Superseded.

Perles des Jardins. Tea. 1874. Levet. Canary yellow, large, or very large, full, well formed, stiff stems, very free. The standard forcing tea with which all others are compared. H—This variety is to the florist what wheat is to humanity, simply indispensable. It has built more greenhouses, fed more florists and enriched more people than any other single variety or half dozen varieties put together. If grown too cool or if over-fed or over-watered it is apt to come bull-headed; 60° at night and a good light sunny structure will invariably cause lots of flowers to show. Give manure water a while, then give top-dressings—change the food, in other words—and see what beneficial results follow. It doesn't pay to keep this rose in over a year; renew every season with young plants. Nothing better than partially rotted sod for its growth and well being. The person who gives us a variety superior to Perle will deserve well of his fellows; M—The best of the yellow teas yet introduced; does best in light soil; in heavy soil a great many buds come deformed in winter; W—In 1875 this was noted by the writer as the best yellow tea rose in cultivation; as a bedding rose it requires the best culture in this section.

Perle de Lyon. Tea. 1872. Ducher. Yellow with saffron center; large, full, very fragrant; subject to mildew. H—Not grown, mildews easily; M—Fine color, but not as good as the preceding for winter forcing.

Perle d'Or. Poly. 1883. Dubreuil. Size rather large for this class; color nankin yellow, orange center; long pointed buds. H—Valuable on account of its size and color.

Perpetual White Moss. M. Laffay. A sport from White Damask; white, tinged with flesh; in clusters of medium size, but little mossed; not so good as White Bath. H—Prettily mossed, fine in bud.

Persian Yellow. A. 1830. Introduced from Persia by A. Willock. Bright yellow, small, nearly full, well formed; small foliage faintly recalling the odor of the *Sweet Brier*. Very hardy. H—Color charming; indispensable in the garden.

Pierre Guillot. H. T. 1879. Guillot fils. Deep red, very double, large, fragrant and good; one of the very best of this class. H—The finest of all the red hybrid teas produced to date. Sweet scented, free in bloom, of good size and charming color. Excellent for pot culture; only a charmed few succeed in forcing it successfully; it inclines to turn purplish in winter; M—Superseded.

Pierre Notting. H. R. 1863. Portemar. Deep crimson, tinged violet; large, globular and sweet. H—A grand dark hybrid; W—Good.

Pink Rover. H. T. 1890. Wm. Paul & Son. Large pale pink flowers with bright centers. Very promising. H—Slightly different from Malmaison; more rampant in growth.

President Thiers. H. R. 1871. Lacharme. Carmine red, one of the darkest of the V. Verdier type. W—Too much like M. Fillion.

Pride of Reigate. H. R. 1885. G. Paul. A sport from Countess of Oxford; flowers punctured and striped with white. H—Interesting when it comes nicely striped.

Pride of Waltham. H. R. 1881. W. Paul. Flesh color, shaded rose; V. Verdier type. W—Not very desirable.

Prince Arthur. H. R. 1875. Cant. Deep crimson; smaller, but better formed than Jacqueminot, to which type it belongs. H—A very valuable addition to its class; M—Good for forcing late in the season.

Prince Camille de Rohan. H. R. 1861. E. Verdier. Deep velvety crimson, large, nearly full. A fine rose. H—Moderate in growth, of richest maroon crimson; M—A grand variety for forcing mid and late season; W—One of the best dark roses.

Princess Beatrice. Tea. 1887. Bennett. Outer petals pale yellow; center golden yellow; petals laced with bright rose. Exquisitely beautiful. H—Of little use; M—No good.

Princess Louise Victoria. H. Cl. 1872. Knight. Salmon pink, of medium size, fine globular form. A splendid rose. W—Good.

Princesse de Hohenzollern. Tea. 1886. Nabonnand. Bright dazzling red; very large and of fine shape. Of Papa Gontier type. H—Inferior to Duchess of Edinburgh, from which it was seeded; M—Not reliable.

Princesse de Sagan. Tea. 1887. Dubreuil. Velvety crimson scarlet. The most brilliant color among all the teas; small and double. H—Too single, and fades quickly; of good color, however; M—Beautiful color, but rather too small; W—Not very double, fine bedder.

Princess de Sarsina. Tea. 1891. Soupert & Notting. Clear yellow with apricot center, with touches of vermilion. H—Nothing special to recommend it.

Princesse Imperiale du Bresil. H. T. 1881. Soupert & Notting. Flower large, double, and of good form; bright rosy carmine, very free. H—No account.

Princesse Radziwill. H. R. 1884. Leveque. Large, double and imbricated; color bright rose and carmine. M—Fine for bedding only.

Princesse Vera. Tea. 1878. Nabonnand. Flesh bordered coppery rose; full, well-formed. M—No good, W—One of the best bedders.

Progress. H. T. 1891. Drægemuller. Flower large, color brilliant carmine red, with shadings of yellow. Very free. H—No particular value.

Queen of Bedders. Bour. 1877. Noble. Crimson, of medium size, very full, free. Color not durable. H—Good color, but poor in growth; W—Beautiful color, but poor grower, not reliable.

Queen of Bourbons. Bour. 1834. Mauger. Fawn and rose, medium or small, fragrant and free. H—Not double enough, others better; W—Good bedder.

Queen of Queens. H. R. 1882. W. Paul. Pink with blush edges, large, full, and of perfect form; free. H—A strikingly beautiful, free-flowering rose. W—Free bloomer, lighter than V. Verdier.

Queen of the Prairies. Pr. 1843. Feast. Rosy red, frequently with white stripes, medium or large, Quite hardy. H—The best of all the climbers for northern homes.

Queen of Waltham. H. R. 1875. W. Paul. Cherry red of good size; fragrant. W—Good.

Queen's Scarlet. Beng. 1880. Hallock & Thorpe. Crimson, a slightly improved Agrippina. W—Improved Agrippina.

Queen Victoria. H. R. 1850. Fontaine. Blush with pink center; large, full, and globular; does not open well. W—Not desirable.

Rainbow. T. 1890. Jno. H. Severs. A beautiful sport from Papa Gontier. The body color is bright pink beautifully striped in deep carmine. Very durable. H—A nicely striped Papa Gontier; a charming rose; M—Not reliable as a forcing rose; W—Not reliable in this section.

Red Safrano. (*Safrano a fleur rouge*). Tea. 1868. Oger. Saffron yellow, shaded coppery red, semi-double. H—Of no value whatever. M—No good.

Regulus. Tea. Moreau-Robert. Flower medium, double and flat; fragrant; bright rose and yellow. W—Fine buds, good bedder.

Reine Maria Pia. Cl. T. 1880. Schwartz. Deep rose, reddish crimson center; raised from Gloire de Dijon. H—A Dijon seedling of little value.

Reine Marie Henriette. Cl. T. 1878. Levet. Cherry red; large, desirable, and somewhat fragrant. Beautiful, but not very free. H—Valuable in the south, and wherever hardy.

Reine Nathalie de Serbie. Tea. 1885. Soupert & Notting. Delicate flesh rose of the most beautiful shade; petals very thick; very large and double, fragrant, subject to mildew. H—Mildews badly, otherwise a good rose; M—Not reliable.

Reine Olga. Tea. 1885. Nabonnand. Coppery red, large, full, and imbricated; of good form and fragrant. M—No good.

Rev. J. B. M. Camm. H. R. 1875. Turner. Carmine rose of Jules Margottin type; large, fragrant and free; superb. W—Fine, very double, not so reliable as John Hopper; more thorny.

Richard Laxton. 1878. Laxton. Reddish crimson, large and full. W—Good.

Richard Wallace. H. R. 1871. Leveque. Red, very large, not first-class. W—Only fair.

Rosy Morn. H. R. 1878. Wm. Paul. Of V. Verdier type; salmon pink; good. H—Flowers burn badly; W—Not so good as V. Verdier.

Royal Standard. H. R. 1874. Turner. Satiny rose, tinged lilac; large, well formed, and globular. W—Good.

Royal Tea. Tea. White, faintly tinged yellow; long, beautiful buds; delicate habit. M—Not reliable.

Rubens. Tea. 1852. Laffay. Bright red; a fine color. H—Better than Devoniensis; W—Not very double, style of Devoniensis; a good bedder.

Rugosa alba. Rug. From Japan. White, of large size, five petals; fragrant; a beautiful single rose. H—Valuable for the garden.

Rugosa rubra. Rug. From Japan. Deep rose tinged with violet, single and fragrant; the flowers are followed by large brilliant hips in autumn. H—Valuable for the garden.

S. Reynolds Hole. H. R. 1872. G. Paul. Maroon, flushed scarlet, medium size, full and well-formed. H—Miserable grower.

Safrano. Tea. 1839. Beauregard. Saffron and apricot yellow, large, semi-double, beautiful in bud; very free. H—Old associations' sake will still retain

TWO BENNETTS. TWO NIPHETOS. TWO CUSINS. TWO WATTEVILLES.

ROSES. SHOWING WIDE DIFFERENCE IN QUALITY OF FLOWERS SENT TO THE WHOLESALER.

this rose; M—Still liked by many; W—One of the best for bedding.

Salamander. H. R. 1891. Wm. Paul. Bright scarlet crimson, large and full; fine substance, free. H—A fine new hybrid of great promise.

Salet. P. M. 1854. Lacharme. Light rose, medium size; flat, very free; one of the best. H—The best of all the pink mosses.

Sanguinea. Beng. Crimson, not as good as Agrippina; W—Flowers, small, good bedder.

Sappho. Tea, 1889. Wm. Paul. Fawn color, shaded yellow and buff; fair-sized flower. H—A promising variety; M—Not reliable; W—Too tender for this section outside.

Senator Vaisse. H. R. 1859. Guillot pere. Red shaded carmine crimson, large, full and sweet. Raised from Jacqueminot. W—Good old variety,

Setina. Bour. Cl. 1859. Peter Henderson. A climbing Hermosa. H—Unsatisfactory except in a few favorite places.

Sir Joseph Paxton. Bour. 1852. Laffay. Deep red slightly tinted violet; medium sized. H—Excused from further service.

Sir Rowland Hill. H. R. 1888. Mack. Rich deep wine color, shaded maroon; distinct and beautiful. H—A good dark rose; W—Beautiful dark rose, but not reliable; poor constitution.

Solfaterre (*Augusta*). N. 1843. Boyeau. Sulphur yellow, large, double or full; a fine climbing rose. H—Useful as a climber in favored latitudes.

Sombreuil. Tea. 1851. Moreau-Robert. Creamy white, often tinted pink, large or very large, full and well formed. Very hardy. H—No better rose for bedding purposes; W—Very large blooms in clusters, healthy, very vigorous, one of the hardiest and best for general planting.

Souvenir d' Elise Vardon. Tea. 1855. Marest. Flesh, shaded rosy salmon; large and full. H—Too shy in bloom; M—Very beautiful, but not reliable in midwinter.

Souvenir de Gabrielle Drevet. Tea. 1885. Guillot fils. Large, full, and of distinct form; flesh changing to pink; petals very thick. H—A novel rose as to color, but disappointing in its general behavior; M—No good.

Souvenir de la Malmaison. Bour. 1843. Beluze. Flesh shaded fawn; large, very full, flat; a fine rose. H—The best of our autumnal roses; needs protection to stand our winters; a royal rose; W—The best light-colored rose of its class; has been injured by bad treatment and over propagation; under normal conditions a vigorous grower.

Souvenir de Lady Ashburton, Tea. 1891. Ch. Verdier. Large and double, varying shades of rose, salmon and yellow; fragrant. H—Valuable and pretty in color, but under size.

Souvenir de Mme. Metral. Tea. 1888. Bernaix. Very large, full, and imbricated; red shading to dark carmine. M—Not reliable; W—Large, very double, fine bedder.

Souvenir de Mme. Pernet. Tea. 1875. Pernet. Tender rose, base of petals tinged yellow; large loose flowers. H—Others better; M—Not reliable.

Souvenir de Mme. Sablayrolles. Tea. 1891. Bonnaire. Large and globular, rosy apricot, shading to yellow; petals bordered carmine. M—No good.

Souvenir de Paul Neyron. Tea. 1871. Levet. Pale salmon yellow medium or small, delicate; H—Superseded; M—Beautiful rose for spring, summer and fall only.

Souvenir de S. A. Prince. Tea. 1889. Prince. A pure white sport from Souv. d'un Ami; one of the best. M—Good, but not for cut flower trade.

Souvenir de Therese Levet. Tea. 1882. Levet. Dark red, very free; one of the best red teas. H—Too small; M—Not reliable; W—Fine for bedding.

Souvenir d'un Ami. Tea. 1846. Defougere. Salmon and rose, large, double and fine. M—Very fine rose, but superseded; W—Fine bedder, very sweet.

Souvenir de Victor Hugo. Tea. 1886. Bonnaire. Large, full, and finely built; beautiful mingling of white, pink and rose. M—Not reliable; W—Large, free bloomer, good bedder.

Souvenir de Wm. Wood. H. R. 1864. E. Verdier. A fine dark rose, but not so good as Prince Camille. W—Fine, dark, not so good as Jean Liabaud.

Souvenir de Wootton. H. T. 1889. J. Cook. Large, double, and nearly globular; a beautiful even shade of red. H—A grand rose that is growing in favor as it becomes known. Forces finely, but requires disbudding; M—A very fine free flowering rose, with fine stem and foliage and extra fine constitution.

Sunset. Tea. 1883. Peter Henderson. Deep apricot, of fine size and free; a sport from Perle des Jardins. H—Rich apricot; accord it same treatment as Perle des Jardins and it will bring as gratifying results. M—A fine variety where it can be grown without having deformed buds; requires same treatment as Perle des Jardins; W—Better for forcing than bedding in this section.

Suzanne Blanchet. Tea. 1886. Nabonnand. Large and full; bright rosy flesh; beautiful. M—Not good for forcing.

Sydonie. H. R. 1846. Dorisy. Rose color, medium size, full and quartered; very free; poor shape. M—No good.

Sylphide. Tea. 1842. Boyeau. Large, full, golden flesh. M—A beautiful rose, and for many years a great favorite in the New York market, but not grown now.

The Bride. Tea. 1885. Jno. N. May. The finest white forcing rose; sport from C. Mermet; habit better than that of the parent. H—The nearest approach to the ideal white rose we have; thrives under the same treatment and temperature as C. Mermet; M—Still by far the best white rose for forcing; W—Favorite for forcing, not always pure white when grown outside, but always fine.

The Meteor. H. T. 1889. Bennett, sent out by Evans. Velvety crimson, the brightest and best of the H. T's.; without

a purple tinge, very free. M—A magnificent rose when well grown, but requires a higher temperature than any other forcing rose I know.

The Puritan. H. T. 1889. Bennett, sent out by Evans. Pure white, of beautiful form and texture; opens badly; though widely distributed has been generally discarded. M—A lovely rose, but very disappointing as a forcing variety.

The Queen. Tea. 1889. Dingee & Conard. A beautiful pure white sport from Souv. d'un Ami. H—A good bedding and pot variety; M—Very desirable for a choice collection; W—Large, very fragrant, fine for bedding.

Therese Lambert. Tea. 1889. Soupert & Notting. Delicate rose, center pale silvery salmon, fragrant and large. M—No value.

Triomphe de Luxembourg. Tea. 1836. Hardy. Buff-rose, large, and fine in bud; a good sort. H—A grand old rose, well up to the front; M—Beautiful rose, but superseded; W—Good bedder.

Triomphe de Milan. Tea. 1876. Mme. Ducher. White suffused pale yellow; a fine rose, in the style of Marie Guillot. M—No value.

Triomphe de Pernet Pere. H. T. 1891. Pernet pere. Large, nearly full; bright red, of good texture; promising. H—A slight tinge of purple detracts from the selling qualities of this rose; were it not for its coming off color this would measure well up. It is worthy of cultivation on account of its many good qualities; M—Uncertain.

Ulrich Brunner. H. R. 1881. Levet. Cherry red; a grand seedling from Paul Neyron, much used for forcing. H—Color splendid, form good, forces finely; M—The finest rose of its color and class for winter forcing; W—Quite a favorite for forcing.

Vallee de Chamonix. Tea. 1873. Ducher. Coppery yellow and rose, of medium quality. H—A superbly colored rose of good character; M—Beautiful, but superseded; W—Beautiful buds, requires extra good culture.

Vicomtesse de Cazes. Tea. 1844. Pradel. Coppery yellow, loose form, delicate habit. H—Superseded; M—No value.

Vicomtesse de Wautier. Tea. 1886. Bernaix. Beautiful rose color, petals lined yellow, sometimes striped. H—Of no particular value; M—Uncertain.

Vicomtesse Dulong de Rosnay. Tea. 1886. Nabonnand. Bright rose, silvery edge to the petals, large, full and well formed. H—Of no value; M—Uncertain.

Vicountess Folkestone. H. T. 1886. Bennett. Flesh white with pearly pink shadings, a fine satin finish, flowers immense, of most elegant form, a grand rose. H—A great rose, weak stem and inclined to mildew, does finely in California; M—Fine rose, but uncertain.

Vick's Caprice. H. R. 1889. Vick. A sport from Archiduchesse d' Autriche. Soft satiny pink, striped and dashed with white and carmine. W—One of the best striped.

Victor Verdier. H. R. 1852. Lacharme. Bright rose with carmine center, fresh shade, but not permanent, not fragrant. H—A good rose, given to burning in our June sun; W—The parent of an immense progeny, not fragrant.

W. F. Bennett. H. T. 1885. Bennett. Beautiful crimson, one of the best red roses for forcing when well done, difficult to manage. M—Still the best of its color and class.

Waban. Tea. 1891. E. M. Wood. A sport from C. Mermet of bright carmine pink called the "Red Mermet." H—Has been disappointing to a good many; a few like it and do nicely with it; M—A failure; this was a very promising variety the first season, but now far superseded by Bridesmaid; W—Good bedder.

White Baroness. H. R. 1882. G. Paul. A sport from Baroness Rothschild, quite as full as the parent, blush white. The queen of white H. Rs. H—Not materially different from Merveille de Lyon; M—Very fine for forcing, similar in habit to Baroness Rothschild; W—The best white sport from Rothschild.

White Bon Silene. Tea. 1884. F. Morat. A white sport from Bon Silene, color not very clear. H—Almost worthless; M—No value.

White Perle. Tea. 1888. Ritter. Nearly white, petals reflexing, very beautiful foliage. H—Out of favor; M—Of little value.

White Perle. Tea. 1890. Nanz & Neuner. Large, full and pure white, a sport from Perle des Jardins. M—Of no value.

White Lady. H. T. 1889. Wm. Paul. Creamy white, magnificent magnolia-like petals. A sport from Lady Mary Fitzwilliam. H—No good.

Xavier Olibo. H. R. 1864. Lacharme. Deep rich crimson, large and moderately full. Superb. H—A slight grower, but a rose of wonderful color and richness; W—One of the best dark roses.

Ye Primrose Dame. Tea. 1885. Bennett. Pale yellow with center of rosy apricot, small or medium flowers, opening from long pointed buds. Almost as full as a polyantha. Constitution delicate. H—A very valuable and interesting rose; M—No good.

Zenobia. M. 1892. Wm. Paul. Satin rose color, soft and pleasing, large, full and globular, well mossed. H—A promising moss rose of high character.

Roses and Roses.

There are roses and roses. A look at our illustrations will convince you of this, if you never thought of it before. These cuts, showing the different popular varieties in various qualities, and reproduced from photographs taken from the ordinary run of stock as received at a New York commission house. No attempt was made to select extraordinary specimens, and no rose here represented is so good or so bad but that much better and much worse samples might easily be selected from an average day's receipts.

The group of American Beauties shows a good No. 1 rose with 30-inch stem and ranging from that through the various lengths of stem, and degrees of twist and deformity down to the "nubbin" with no stem at all. These were all taken from the stock of one grower. There is but one rose in the lot that can be sold to a first-class store, and it will bring during the winter season an average price of one dollar. With the exception of two specimens to the left which might possibly bring half price, the balance do well if they average five cents each.

The same is true of the Magna Charta. The two largest will bring a good price. The other two are absolutely valueless. Extremes are also well shown in the specimens of La France on the same plate.

In the collection of Meteors the two on the left are what are termed "bullheads." The petals are shrivelled and black and refuse to open, and as a consequence although all right as to length of stem, foliage, etc., they are unsalable and might as well have been thrown away at once. This defect in the Meteor is generally attributed to too low temperature in the houses.

The other plates show fair salable specimens of the leading commercial varieties each alongside a representative of the "rubbish" sent in under the same name.

We need scarcely add anything to the lesson which these illustrations teach. They point their own moral. Although the rose business in general is overdone yet in this industry as in everything else, there is abundant room *at the top*. Just work your way up there and you will find there is no crowding.

The Rose Men at School.

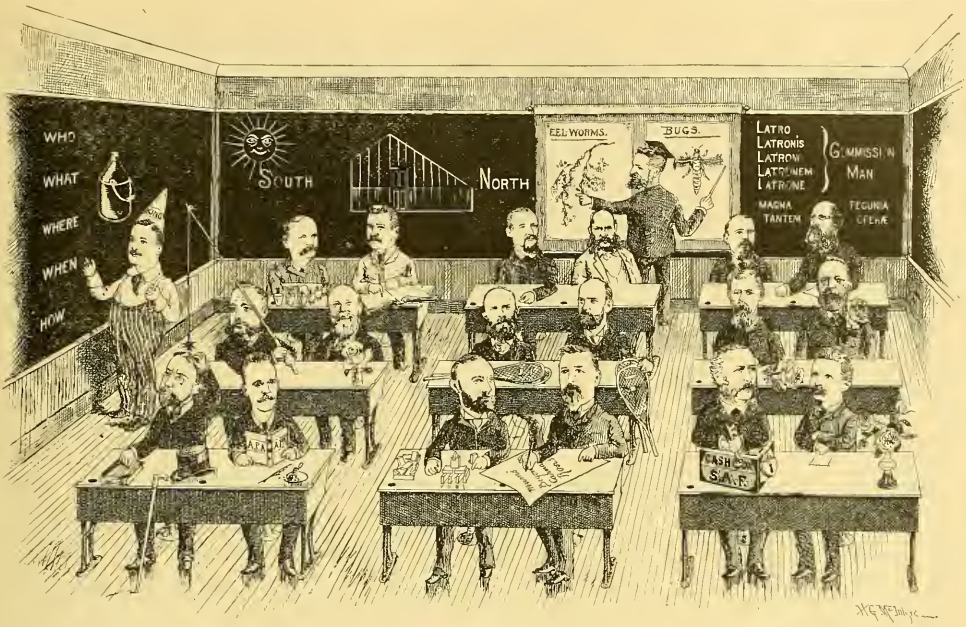
The rose men are somewhat behind their friends the carnation growers in that they are not yet fully organized, therefore cannot present the bold and confident front which our carnation number so well illustrated in the case of the valiant Duke and his army of loyal followers. Still it will be well for the carnation men to remember that the days of study are never at an end, and graduation from the school room to the tented field does not mean that they have nothing more to learn. In proof of this we would like to know how many of them there are who can repeat Prof. Atkinson's essay on diseases of the carnation, word by word from memory.

The rose men are no exception to the general rule that "men are but boys of a larger growth." In every school we find the studious boy, the ingenious boy, the mischievous boy, the boy who can learn without studying and the boy who has to study hard to learn anything at all. This latter character may be missing from the array of notabilities gathered together in our illustration, but the rest are all there and several other types besides.

The FLORIST extends to the rose men its sincere regards; it congratulates them on the progress which they are making in their chosen study; it hopes that during their course of study and preparation the Special Rose Number of the AMERICAN FLORIST will be adopted by them as their standard text book and book of reference, so that in the near future A No. 1 roses will be the only crop and such things as "nubbins," "skates" and "sculch" will be unknown.

Rose "Melange."

Almost every locality has its specialty as to certain varieties of roses. In one place La France is a great success, while Mermets average poor, and vice versa. One grower succeeds beautifully with Cusins and Wattevilles, another fails. You admire the grand Meteors as grown by one man, and wonder why the next one doesn't do better with them, and so on. A. says I cannot grow good Mermets, but am always sure of Cusins and Wattevilles. B. hardly understands why he fails with the latter, and has no difficulty with the former. When I make a failure of anything, I propose to know the reason why and wherefore, *causa sine qua non*. Either one or two conditions are unfavorable, provided other things are equal—soil, atmosphere. I think it is pretty well understood that soil plays an important part towards success or failure with different varieties. Hence the reason that better roses of some one or two sorts are produced at a place because the grower finds he can do better with them. The larger grower for the leading markets or commission dealers, the past season, would have found Meteor, La France and American Beauty the most profitable, or either one giving a better margin than the ordinary teas;



SCHOLARS ALL.

not so, however with the smaller grower, or one who supplies the general trade. Of course it is better to grow a house of one variety whenever possible but not every rose grower is so situated, and then he needs to adapt himself to his requirements as best he can. Those roses that are subject to black spot keep by themselves, as Perle, Sunset, LaFrance. Those more subject to mildew, Mermet, Bride, Hoste, Watteville, will grow well together in the same house under the same conditions.

Suitable soil for roses wants to have "life" in it, and I don't mean cut worms, or the like; such a soil is too lively by half, as you may have experienced. If you are in doubt examine and test the soil you use. I think I can tell, as most growers do, by the looks, feeling and smell, whether soil is any good or not. There is no secret about it, simply your experience and mine, in the matter. I thoroughly respect scientific knowledge, I am reputed no mean botanist, naturalist etc., myself, but that does not necessarily make me or anyone else practical as a grower or business man. Some, whom I regard highly as theoretical scientists, are anything but practical, with all their knowledge, when it comes to the actual business of life. I believe success, as we term it, whether in one thing or another, is not an accident as some seem to think, but is simply what may be secured by earnest effort and unflagging zeal. You or I may have been born with a strong will power—that's all. It answers to what is said of the French woman: "Give me good eyes and I can supply the rest." I make this digression to prove my point. I am tired hearing of failures ascribed to either natural or unnatural causes that are nothing more than our own mistakes or laziness; something that might be remedied if we chose to set ourselves about it.

For winter, every grower wants as light a house as possible. Double thick glass, sixteen by twenty-four, is about the right size, all things considered, and costs no more per box than twelve by eighteen. First quality natural gas process American glass, is equal to second quality French. As the price varies somewhat from time to time one may be found cheaper to buy than the other. Prices of both are advanced from last season.

Side as well as top ventilators, are a help towards growing Mermet, Bride, Hoste, Cusin, Watteville, for winter forcing. It keeps the plants from "drawing" on hot sultry days, letting in more air. A weak soft growth encourages an attack of mildew. as a weak stomach invites dyspepsia.

The best roses I have had all along the whole season through, and in first-class condition at the present time, and likely to hold out up to July, were planted May 1, 1892 in such a house, 20x250. My experience has all along favored early planting. Stock is in better condition to force, if strong and sturdy before winter sets in. I know of whole houses that have played out this past winter because of weak growth from late planting. I plant out my houses at different dates from May to July. Commence cutting from the first planted, usually September 1, and the others in October or November, as needed. The house as above mentioned contains Mermets, Brides and Hoste, and has had *hosts* of admirers from the craft generally. The raised beds were mulched once in the early fall, covered over lightly with friable, freshly decomposed sod, and given liquid manure fortnightly afterward, (guano and horse manure mixed) from a large cement cistern outside, with the force pump under cover. I am a disciple of "cleanliness" as to principle and deem it next to "Godliness" even in a greenhouse. Mr. Wm. Scott says in his miscellany, "a good large 'dump' pile is always a sign of a progressive florist." I say it is altogether where it is located! inside or out!

We give the manure watering on a bright day when the beds are dry enough to readily absorb the liquid—about the color of strong tea. You can smell the ammonia in the atmosphere for a week afterward, and a good healthy smell it is too, with lots of ozone. According to my experience it gives not only a better color in dull weather to the roses themselves but vigor to the foliage, at the same time averting tendency to mildew. I have had no malformed buds or "off" color in Mermets all winter, nor mildew. I ascribe it to good feed and a vigorous appetite denoting healthy life. It is not what you put into your stomach though, that nourishes one and builds up the tissues, rather what you are able to digest and assimilate. Just so with roses. I get better results from ground bone in solid beds than raised. It is slower in its action but more permanent. There is everything in getting a pure article—the best or none.

Meteor, La France and American Beauty require a higher temperature than the ordinary teas. Have you noticed in Meteor that if the terminal bud is left on in winter—no matter how strong the shoot—it comes malformed and black looking, while the side shoots always give good shaped bright blooms? This is not the case in summer from solid beds.

What a difference it makes disbudding Wootton. It gives not only larger buds but better color and more substance. Bridesmaid is the favorite Mermet, a bright pink even in dull weather. Niphetos and Perle are not greatly sought after by the retail trade as in former years, neither are they as much grown,

except with the smaller growers. Gontier is getting to be also a back number, not over productive and such a poor keeper. The retailer takes no stock in it. Where is all its fragrance that the catalogues vouched for? Wasted on the desert air, I am afraid. I never *could* get there! Its sport Rainbow would be a good rose for the amateur, though like its parent, having no fragrance to speak of.

Give us a Bon Silene with Gontier foliage, and one would score an improvement. The foliage of Bon Silene is so very soft.

Augustine Guinoiseau I consider to rank along with La France for either season. Its color is exquisite, a soft pinkish white with satin luster, much like Malmaison in summer, though of a deeper flesh tint in winter, yet fully as desirable. It is a rose that will grow in favor as it is better known.

Mme. Pierre Guillot is a distinct failure as to winter forcing—it does better however, later on in the season, also good in summer or fall. Free, rather dwarf and quite subject to mildew. Watteville is all right and Cusin steadily advances in favor with grower and seller. I am not ready to pass an opinion on Mme. C. Testout and Kaiserin Augusta Victoria as to being profitable for forcing. Both are first-class as to planting in solid beds for spring, summer and fall use. Madam A. Veysset, "striped La France," will prove of some interest to the amateur—of doubtful value to the florist. You can count on your fingers, even if you don't have a "full hand" those who will plant Duchess of Albany for winter forcing. In dull weather it is "no good," frequently has a "muddy" color or purplish tint that is far from attractive to say the least. It has a "black eye" with the retail trade; still along with some others it has marked improvement when the sun gets higher, having then large, good shaped blooms and a bright, clear color. I class it distinctly as a *summer* rose. Summer heat weakens Brides and Mermets for cutting. They are too small at this season, and the leafage very subject to mildew. Cook, Hoste and the new Kaiserin take the place of Bride, while La France and its types (sports or varieties) are so good that Mermet is "non est tempora"—freely translated, "not in it for the time being." La France in summer is an ideal *pink* rose; of course the color varies somewhat, under different conditions, yet the general average is a pure self pink in its entirety. Even F. Schuyler Mathews must admit the "tone" is O. K.

Hoste furnishes nice tinted buds in summer, and is much better than I expected at this season. I thought it would be "too thin." Sunset, however, is not so good as it is in winter—dull colored. It is way ahead of Perle for forcing; comes uniformly better shape and its rich color delights all beholders. Meteor is *the* red rose for summer. Marechal Niel (grown in bush form) divides honors with Perle. Niphetos too is quite satisfactory, enduring summer heat well. American Beauty for late summer use had better be planted (select stock) first of May each year, while all the others on the list are good for several years. American Beauty gets hard and woody sooner than the others, and the color is much brighter on young plants in summer.

It is a question with me whether I would use raised beds, even for winter forcing, except perhaps with the hybrid teas, American Beauty, LaFrance, Meteor, etc. All the others can be easier grown at much less expense, no rotting out of benches, no fungi from decaying wood, in fact less general care. Mermets always seem to have good color in solid beds, rarely fading out in dull weather. In protracted cloudy or rainy weather there is no need to water until Sol shows his face again, absorbing the surplus moisture without so much as blinking. It is often a choice of two evils, watering in cloudy weather. The raised benches either get too dry and the tender roots become hard, or the beds soggy because of mal-evaporation and a dose of "black spot" seems to look you in the face! If perchance you avoid Scylla's shoals Charybdis' rocks may break you all up—so it goes!

Eternal vigilance is the alpha-omega essential, as far as success with roses is concerned. "While they slumbered and slept the enemy came unawares." Any novice who thinks there's "millions in it" will soon be disgusted. There are more "ins and outs," poor fellow, than he ever dreamed of! By the way, I have a "sport" from LaFrance of a *bright red* tint that if it only "hangs fire I will be in the swim" myself! I am aware though that "sports" are mighty uncertain. There's Waban for instance. Possibly you may never hear more of my "red" LaFrance.

A house for summer roses is not near so particular as to location or style, nor does it require to be so light as for winter use. Equal span roof preferable, perhaps with facilities for free ventilation during hot, sultry days. Hybrid teas and Cooks, as well as other varieties of the hardier teas may be wintered without any fire heat. Perles and Niels are more tender. A house of these should be kept comparatively free from frost, with just enough firing, in severe weather, to keep the ground from freezing. Very little heating service is required, only enough for emergencies, a cold wave in late spring and occasional cool, damp weather in summer or early fall. A little firing under these circumstances is a preventive of mildew, etc., besides ensuring higher grade stock.

Nearly every rose grower needs one or more houses of this sort for summer trade, with no greater cost than growing a lot of ordinary stuff not half so salable or desirable. Provide for ample drainage and the soil may be generously enriched and mulched with less danger of over feeding as in winter. The ordinary season for good blooms in a cold house properly treated is from May to November, after which gradually cease watering and keep rather dry until the wood starts into growth (all weak stuff thinned out) the following spring. If you want to get the roses in earlier, for Easter, and to hold them in crop until after the holidays, as I do with one range, more heating capacity is needed and more frequent replanting. Once in two or three years by the latter system, five or six by the former. Roses are like a draft horse in the respect that good care gives better service and more lasting powers.

Now one more word as to soil. The compost I use for all my roses is two parts freshly decomposed, friable, soddy loam, thoroughly incorporated with one part freshly rotted clean cow manure; no other fertilizer at this time, later, using "mulching," ground bone as a top dressing and liquid manure when the abundant roots are active and working. The balance of rose growing is proper care and atmospheric conditions.

I take it for granted that you both propagated and planted nice clean healthy stock, it is poor economy to do otherwise, let first cost be what it may.

I simply give you my experience and observation, offered not as advice but suggestive: In whatever way it affects you, kind reader, whether agreeing to assent or dissent, combative or otherwise, do as an aggressive German said when treated to advice: "I do as me tamn plees."

GROVE P. RAWSON.

Elmira, N. Y.

Stocks for Garden Roses.

In selecting rose plants for garden purposes the choice will naturally fall upon that class giving the earliest and freest bloom, and grown upon a stock best calculated to produce these results.

The choice of stocks must necessarily be either the own root, Manetti, Briar in its several forms, or perhaps the Multiflora.

Own roots are desirable, but in production of large plants are slow, which in the short season of our northern latitudes is a serious drawback; there are many of the choicer kinds which do not grow well in this form, especially the short-jointed varieties.

For quicker results we must turn to the worked plant, and in the Manetti, we find the vigor needed. This is a stock adapted to a variety of soils, excepting that which is excessively wet. Buds on this stock if properly grown will give plants of very large size in one season, and it is very quick in responding to cultivation. So long as its ward, the bud, is in a healthy, vigorous condition, it will prove thoroughly loyal, giving its whole strength to its charge, and in these conditions seldom throwing up suckers. This is clearly shown by lifting a plant in healthy state, when the stock will be found a little larger in diameter than the growing stem. In the permanent planting of this class of roses successfully, the plant should be set from three to five inches below the point where the bud is inserted. It will then throw out roots above the stock, the first year of planting, with most varieties, becoming a combination rooted plant. It is only when, (in a demoralized state from any cause) the growing plant ceases to respond to the vigorous work of the stock that the latter asserts itself. It is sometimes claimed that this stock is short-lived; this may be true to a certain extent, but even if so, it is of little consequence, as the rose has already supplied its own roots. Some years ago there were plants on the Manetti stock in my grounds, that had been planted from twelve to fourteen years, from which were cut prize flowers, exhibited before the Mass. Horticultural Society. In the fall of 1891 these plants were lifted, the top and roots well trimmed, and the plant re-set in fresh soil, and last summer they gave a fine crop of flowers.

With the Briar stock, there is a different condition. This is a rampant grower; it will give to the bud all the strength it needs for a large plant, and still has enough to spare, and soon starts off on its own account, sending up a sucker perhaps two feet away from the plant, without immediately affecting the vigor of the rose. In lifting the plant, the Briar root will be found one-fourth less in diameter than the growing stem, although the Briar has dealt justly by the bud entrusted to it; its superabundant strength is its great danger, but it is an excellent stock for certain varieties.

In the Multiflora, we have a stock of very great promise, and one that will

THE SCALLEN BASKET

undoubtedly prove popular when fully tested, as it seldom suckers, and produces a multitude of fine roots.

Roses that are difficult to transplant, as Marie Bauman, Maurice Bernardin, Mme. Chas. Wood and Louis Van Houtte, or poor growers like Horace Vernet, Xavier Olibo, Capt. Christy and some other fine sorts, must have the vigor of a secondary stock. Upon investigating the complaints urged against budded stock, we generally find that the plant was not set deep enough, but when re-planting could be done, after being planted deeper, it has always proved a success. Want of practical knowledge on this subject is the fruitful cause of failures. WM. H. SPOONER.

Jamaica Plain, Mass.

The Scallen Basket.

The accompanying plate is from a photo of the "Scallen basket," so named in honor of Mr. J. W. Scallen, the New York florist, by Mr. Ed. Jansen, the manufacturer of these baskets.

The basket is made of perforated metal, is twelve inches in diameter, and is filled with Cusin roses and adiantums, with pink ribbon on the handle. It was arranged for us by Mr. Scallen.

Notes on Tea Roses.

The number of varieties of tea roses which we find profitable to grow for winter cutting does not exceed two dozen. If asked to name the variety most profitable of all I would say "The Bride." It is *the* white rose, up to date. To get it in best quality it requires a good stiff rich soil and generous treatment, and extremes in watering or dryness should be carefully avoided. Its parent, Catherine Mermet, if treated as recommended for Bride will also respond satisfactorily, and fading or uneven coloring can be largely avoided by close attention to these points. The Mermet is still the finest rose of its color grown. The Waban still sells well in Boston and there seems to be a place for it, its high color being its main point. It seems to come best with us in shallow benches. The tendency to deformed flowers which has so injured its reputation elsewhere is a freak of nature which no one can account for. The variety did not show any trace of it for two years. There is no question that the color of Bridesmaid is a decided improvement on that of Mermet. The color is beautiful and is maintained in all weathers. But with us it does not seem so strong a grower and we do not get the size that we do on Mermet. For all these varieties our day temperature is 70° to 75°, and for night 54° to 56°.

The Meteor is indispensable. There is no other rose of its color for winter. It is free flowering, strong, and long stemmed. Its greatest fault is its tendency to come black and bull-headed in mid-winter. This can best be prevented by avoiding too much moisture or low temperature. If the temperature gets down, it is sure to bull-head. It requires a steady high temperature, say 75° to 80° by day and 65° to 68° by night. It seems to thrive best in a moderately rich light-colored soil on shallow benches.

The Cornelia Cook although generally discarded by other growers is still one of our best paying roses. Its large fine flowers and strong stems make it invaluable for large vases, and its tendency to bruise is its only fault. To get fine flowers you must have old plants trained on a trellis. It is no good trained to stakes as Mermet and Bride are grown. It requires a moderately dry soil, more so than Bride or Mermet, and all you can give it to eat. It opens better with a high temperature, and when the plants get a little age shows no tendency to come bull-headed. Day temperature 70° to 75°, night 56° to 58°.

American Beauty with its free growth, large flowers and continuous blooming qualities is entitled to a prominent place in the list, but the large number of short-stemmed and deformed flowers produced is a constant source of trouble and disappointment to most growers. Overwatering, low temperature and deep benches are all against this rose. It requires a moderately light soil and more heat than the general run of teas, say 70° to 80° by day and 58° to 60° at night.

Mme. de Watteville is my special favorite in its class. It is free-flowering, of good size and beautiful color and keeps well. Its defects are its tendency to run thin and burn in the spring of the year, but with a little shading and lower temperature this can be often avoided and the size and color kept up. It requires in winter a day temperature of 70° to 75° and a night temperature of 54° to 56°.

Mme. Cusin is gradually working its way into popularity in Boston. Its remarkable free-flowering capacity and its fine color in mid-winter are its best features, but its color in spring and fall is too dark and contains too much purple for the popular taste. Another trouble is its tendency to die off without any warning. It requires a strong light and very even moisture, and must not be allowed to get the least overdry. Temperature required 70° to 75° day and 56° to 58° night.

The Bennett is the best rose of its class. If the cultivation of the Bennett had been as well understood at the time of its introduction as it is now there would have been a lot of money made on it. With careful, generous treatment, strong temperature and good feeding it comes every time. It has been grown too cool and too wet, and short-stemmed flowers have been the result. If the temperature is kept up there will be no blue ones. We grow it now in the Meteor house where it is kept at 75° to 80° by day and 65° to 68° at night, this perhaps makes the flowers a little thinner but of fine color.

Papa Gontier wants a cool temperature. It loses its leaves in heat. I do not think it pays to grow Gontier. It does not throw flowers enough to compare with other roses in the regular tea class. The Bon Silene is full as good a rose as Gontier when well grown. Grown moderately cool, about as Brides and Mermets, it would still beat Gontier and throw three flowers to one of that variety. Nothing but high forcing has spoiled the Bon Silene. It is too good a rose to throw away.

Niphetos, although the whitest of all teas, appears to be losing ground. Florists will take a small Bride in preference to a large Niphetos. It will do better on

FIRST CLASS MERMET FROM 2 1-2-INCH POT. LIFE SIZE.
[SEE ARTICLE ON CLASSIFICATION OF YOUNG ROSE PLANTS.]

a shady bench than any rose I know of and is also useful for low side benches where there is not room for anything else. It does best in a day temperature of 70° to 75° and night temperature of 54° to 58°.

Perle des Jardins and its sport Sunset we have had to about discard on account of its coming deformed in mid-winter. It is a pity that this is so as it is really the only yellow rose we have. I believe that by avoiding overfeeding, and growing on shallow benches with stronger heat, say 75° to 80° by day and night temperature 58° to 60° its defects may in time be overcome. The White Perle I have had no opportunity to test, but a rose of that description would be an acquisition.

As to La France and its relative Duchess of Albany, we find that La France is a better grower and will throw

SECOND CLASS MERMET FROM 2½-INCH POT. THIRD CLASS MERMET FROM 2½-INCH POT.

BOTH THE ABOVE ARE LIFE SIZE. THE ROOTS OF THE THIRD CLASS PLANT WHILE NUMEROUS WERE NOT IN A HEALTHY CONDITION; MOST OF THEM HAD EVIDENTLY BEEN MADE IN THE SAND BED.

[SEE ARTICLE ON CLASSIFICATION OF YOUNG ROSE PLANTS.]

many more flowers than Albany, but the color of Albany takes decidedly better in Boston than that of La France. The most conspicuous fault of both is their liability to come "off color" and to fade out to purple with age. Shallow benches, rich soil, with moister atmosphere and more heat than the general run of teas are needed; 75° to 80° by day and 56° to 60° by night are about right. Augustine Guinoiseau or White La France promises to be a useful rose. The color is delicate and the buds do not "ball-up" as La France is apt to. It requires good La France treatment, with temperature a trifle lower.

Mme Hoste, if it were not for its coming so much in crops and tendency to "off color" would be hard to beat as it is a very free bloomer and in size, foliage and growth is all to be desired. Succeeds best with Mermet treatment.

Mme. Isaac Pereire is a rose we have not thrown away yet. We have tried it in a house with Meteor the past winter and got a good percentage of fine flowers from it. We have not been able to get the color on it in the regular tea houses.

Mme. Pierre Guillot is not up to Watteville with us. It sits still in mid-winter, and the blooms are so small that they are not worth much Then its tendency to mildew is another bad point. It requires a temperature of 75° to 80° by day and 56° to 58° at night. It takes a

strong heat to get it at all in mid-winter.

Ethel Brownlow is one of the new ones. It is too near Mermet to ever become prominent. It is not so strong as Mermet nor is the flower as large. Still a person growing it for home trade would find a very nice rose for this purpose. It could be grown on side benches and should be given Mermet temperature.

Mrs. Paul is going to be a grand summer rose. The flower is good, somewhat like the old Souvenir de la Malmaison only larger. It is also a stronger grower and the buds come on single stems. It is not yet fully tested but is certainly a very promising variety.

Kaiserin Augusta Victoria. If it were not for the Bride this rose would carry everything before it. Still there is going to be a place for it. It will probably do away with Hoste. The flowers are finer and larger and stems stiffer, and there are but few small or weak blooms. I have not seen any bad points in it yet, except possibly a slight tendency to come in crops.

Mme Caroline Testout. This will do away with La France and Albany. Its color is more even and holds well, while it is fully as good a grower and bloomer as either of them. It comes best in good light, and Mermet temperature.

Ma Capucine we grow a few of for its color. For beauty of color and freedom of flower it cannot be excelled, but the flowers are too small to be of any value. It wants to be grown rather cool, say 65° to 70° day temperature and 54° to 56° night. ALEX. MONTGOMERY.

Classifying Young Rose Plants.

Every buyer of young roses, and every grower of really good stock for sale, has long felt the need of some more definite classification of young stock than the size of the pot the plants occupy, as the latter really gives but little information as to the real value of the plant. A 2½-inch pot plant may be a well grown little plant of fair size and strength, or it may be a rooted cutting not long out of the sand bed, and the wide difference in value between the two is undoubted. Still both can be honestly classed as 2½-inch pot plants.

We believe that the time will come when a full and thorough classification, covering every possible point of difference affecting the value of the plants, will of necessity be formulated and generally adopted, and as a step in that direction we present herewith illustrations of three plants that will, we believe, be of considerable interest.

A few weeks ago we sent to six leading rose growers for samples of 2½-inch pot plants of Mermet roses, one to be first-class, one second class and the other third class plants. When these were all in hand we selected one plant showing the average of those sent us as first-class, another showing the average of the second class, and another showing the average of the third class, and after washing the soil from the roots had them photographed life size. The accompanying plates are from these photographs and show the average plants, life size, as received. Therefore these plants may be taken as representing the average idea of the leading growers as to what constitutes first, second and third class plants of tea roses, and may be referred to by buyers in ordering.

We hope that this object lesson, though imperfect and incomplete, may lead to a consideration of the important subject of complete classification, and the adoption of some practical plan hastened.

Certain it is that the lack of a reliable classification has tended toward the production of poor stock that could be sold at low rates, simply because there being no way of making quality plain to buyers through the medium of advertisements and price lists, the lowest price generally attracted, though the plants might be dearer at the price quoted than really good stock at double the rates.

Some steps should surely be taken to correct this tendency and to disseminate a truer idea of actual values. And we can do this only by establishing some standard which shall be universally recognized by all in the trade.

The American Rose Society.

ED. AM. FLORIST:—The subject of a National Rose Society has been so often and so well "written up" that it seems almost unnecessary for me to take up your valuable space with anything I can say in regard to the many great advantages to be derived from such an association The accompanying copy of constitution and by-laws will, I trust, be acceptable to all the many interested people, and that it will be favorably received is the earnest wish of its framers. And it is the hope of the committee that before our annual meeting next August, we can show our many foreign visitors a complete organization and show what we can do on "this side of the water" even in a short time. We, by hearty co-operation, have done wonders in the past and we hope that the "American push" will not fail us in so important a matter as a Rose Society.

There was so much said, pro and con, in regard to the contemplated reserve fund that it is, perhaps, not out of place to say briefly that on mature consideration it was thought advisable to drop that part as it seemed to be a subject that was specially liable to be misunderstood, and the framers felt like Midas of old, that they were richer than Croesus, as they have but to show the necessity and advantage of a special fund, and it would be forthcoming.

In order to complete the organization and to have the society in working order by next August, the following temporary officers were elected to serve until the meeting in St. Louis, when officers and executive committee could be elected in annual session. President, M. A. Hunt, Terre Haute; Ind.; Vice-President, Robert Craig, Philadelphia, Pa.; Treasurer, John N. May, Summit, N. J.; Secretary, H. B. Beatty, Oil City, Pa.

The time of annual meeting will be announced in the program of the Society of American Florists, and in the meantime every grower and lover of the rose (and what grower is not a lover of the "Queen") is earnestly requested to at once forward his name to the secretary. We want you to join, and honestly think it will amply repay you directly in dollars; but send your name anyway, we may have something of interest to mail to you. H. B. BEATTY, Sec'y.

Oil City, Pa.

CONSTITUTION AND BY-LAWS OF "THE AMERICAN ROSE SOCIETY."

ARTICLE I.—NAME.

Sec. I—This organization shall be known as The American Rose Society

ARTICLE II—OBJECTS.

The objects of this society are:

1st: To increase the general interest in the cultivation, and to improve the standard of excellence of the rose.

2nd. To foster, stimulate and increase the production in every possible way of improved varieties of roses suitable to our American climate and requirements.

3rd: To organize a system of exhibitions at such time and places as this society may from time to time decide on, to offer prizes of money, gold, silver and bronze medals, and certificates of merit for meritorious new varieties of roses under such conditions, rules and regulations as the society may adopt. After adoption, such rules to be subject to alteration or amendment in accordance with Art. VIII., Sec. I. of the by-laws.

ARTICLE III.—MEMBERS, VOTING.

Sec. I.—Members—All persons who are in any way interested in the culture of the rose, whether as professionals or amateurs, shall be eligible to membership.

Sec. II.—Voting—All members of this society, except honorary, shall be entitled to one vote on all questions.

Sec. III.—Honorary Members. Any person whom this society shall deem worthy of the honor, may at any annual meeting be elected an honorary member, by a two-thirds vote of the members present.

ARTICLE IV.—GOVERNMENT.

Sec. I.—Officers.—The officers of this society shall consist of a President, a Vice-President, a Secretary and a Treasurer.

Sec. II.—Executive Committee—The management of the society between sessions shall be vested in an Executive Committee of six, to which the President, Vice-President, Secretary and Treasurer as ex-officio members shall be added.

ARTICLE V.—PROXIES,

Sec. I.—All members entitled to vote may do so by proxy at any meeting, and, if sent to him, it shall be the duty of the Secretary to cast such votes in accordance with member's instructions.

ARTICLE VI.—AMENDMENTS.

Sec. I.—The constitution may be amended or altered at any annual or called meeting, by an affirmative vote of two-thirds of all the votes represented either in person or by proxy, when notice of such amendment or alteration shall have been given at the preceding annual meeting, or furnished to the Secretary and mailed by him to all members at their last known places of residence, at least three months preceding the meeting at which action is to be taken. In case action is to be taken at an annual meeting, then notice of such proposed change shall also be published in the general program of the society (if one is issued) for that meeting.

BY-LAWS.

ARTICLE I.—MEETINGS.

Sec. I.—The annual meeting of this society shall be held at the same time and place as the annual meeting of the Society of American Florists.

The Executive Committee shall meet from time to time as adjourned, or on the call of the President.

ARTICLE II.—ELECTIONS.

Sec. I.—The President, Vice-President, Secretary and Treasurer, shall be elected by ballot at the annual meeting, to serve for the terms of one year from the first day of January succeeding their election.

Sec. II.—The Executive Committee shall be elected by ballot to serve for the term of three years from the first day of January succeeding their election, two to be elected each year at the annual meeting

ARTICLE III.—DUTIES OF OFFICERS.

Sec. I.—President—The President shall preside at all meetings of the society, and Executive Committee, and may call meetings of the Executive Committee when he shall deem it to the best interests of the society to do so.

Sec. II.—Vice-President—In the absence or disability of the President, the Vice-President shall perform his duties

Sec. III.—Secretary—The Secretary shall conduct the correspondence of the society; shall have charge of its papers and reports, and shall make a report at the annual meetings.

Sec. IV.—Treasurer-The Treasurer shall receive and keep an account of all monies belonging to the society, paying out the same upon orders signed by the President and Secretary, and shall make annual reports of receipts and disbursements. Three members of the society, appointed by the President, shall audit these accounts at the annual meetings of the society.

Sec. V.—The Treasurer shall give such security for the faithful performance of his duties as the Executive Committee shall from time to time consider sufficient, and shall make such investments of any surplus funds in his hands, as the Executive Committee may from time to time direct.

ARTICLE IV.-DUES.

Sec. I.-The annual dues for all members, except honorary, shall be the sum of Five Dollars ($5.00).

Sec. II.-All members whose dues are unpaid shall be so notified by the Secretary, and when a member shall have paid no dues for a period of 12 months after receiving such notice, his name shall be dropped from the rolls, and he can be re-admitted to membership only by a majority vote of the Executive Committee, and on the payment of all dues he may be in arrears at the the time of re-instatement.

ARTICLE V.-FUNDS.

Sec. I.-The Executive Committee shall not incur any debt or liability in the name of the society, beyond the the amount of available funds in the hands of the Treasurer.

Sec. II.-Every resolution involving an appropriation of money, must be referred to the Executive Committee before it can be acted upon; and it shall be the duty of the Committee to report on the same at the next session; provided, however, that in cases of urgency, the Executive Committee may retire for consultation, and report at the same session at which such resolution is introduced.

ARTICLE VI-VACANCIES.

Sec. I.-In case of any vacancy in the Executive Committee from any cause, the Committee shall have power to fill such vacancy for the unexpired term, by ballot, subject, however, to approval of the society at the next annual meeting.

ARTICLE VII.—SPECIAL MEETINGS.

Sec. I.—By the written request of the majority of the Executive Committee or of 25 members of the society, the President shall call a special meeting of the association at such time and place as is set forth in the request. The call shall state the object of the meeting, and each member shall have 30 days notice thereof by mail, and no action of said special meeting shall be binding on the society, unless two-thirds of the votes of the society shall have been cast.

ARTICLE VIII.—AMENDMENTS.

Sec. I.—The By-Laws may be amended or altered at any annual or special meeting, by an affirmative vote of two-thirds of all the votes cast, when notice of such amendment or alteration shall have been given (if annual meeting, in the general program, if one is issued) by mail to all members, at least 30 days preceding such annual or special meeting. In case action is taken at a special meeting, then two-thirds of all the votes of the society must be represented, either in person or by proxy.

ARTICLE IX.- ORDER OF BUSINESS.

Sec. I.—The transaction of business shall be in the following order,

1. Calling to order;
2. Reading minutes of previous session;
3. Reports of standing committees;
4. Reports of special committees;
5. Miscellaneous business;
6. Essays—Discussions;
7. Election of officers (on last day)
8. Appointment of committees;
9. Adjournment.

Meteor.

"Full many a gem of purest ray serene
The dark, unfathomed caves of ocean bear;
Full many a flower is born to blush unseen
And waste its sweetness on the desert air."

While Meteor may not have been destined "to waste its sweetness on the desair," it certainly was "born to blush unseen" for many years in that most desolate of the waste places on this green earth, the neglected greenhouse bench. The history of this rose, like that of many of its human prototypes, is of a neglected youth with all its good qualities and high capabilities smothered by uncongenial environment and unsympathetic treatment, its worth only to be discovered by strangers in a strange land, and shows how many really very valuable plants may be undeveloped by their originators and have their good qualities hidden for years, while those of less merit are overpraised and become famous.

The Meteor was raised by Mr. Henry Bennett, the renowned English hybridizer, at about the time he produced the Bennett, but was considered by him to be very inferior to that variety. When the Bennett was purchased by Mr. Chas. F. Evans, he was presented with the Meteor as a sort of bonus. At that time its merit was not revealed, hence it was neglected and its great possibilities as a forcing rose remained unrecognized until two years ago, when I believe it was first forced successfully in quantity. When we remember that Meteor is a much more valuable rose than Bennett it seems strange that its good qualities should have remained unknown to its originator and not fully discovered by its original owners for many years. The reason for this has probably been its peculiarities and the difficulty of successfully forcing it.

There has always been a great demand for a good crimson rose, and for years the Jacqueminot had the field all to itself, but as it could only be had in late winter and spring, there was still plenty of room for a continuous blooming crimson rose that could be had in bloom the year round. Pierre Guillot, Duke of Connaught and Bennett were each thought to fill the bill, but all developed fatal weaknesses, until now scarcely a plant of the two former varieties are grown and there is only an occasional grower who can succeed with Bennett, and of late years it has become quite unusual to see that rose displayed for sale in the florists' stores. The long pointed buds of Bennett have been much admired, but to me they have always appeared stiff and formal, unrelieved as they are by the graceful curl of the petals so beautiful in some of the other roses. Bennett has the serious fault of being very single, and hence is of no use in warm weather, as it opens and spoils very quickly.

The Meteor when well grown is certainly one of the most beautiful of all the roses, though it must be confessed that it resembles Longfellow's little girl, who "when she was good she was very very good, but when she was bad she was horrid." While standing near the rose exhibit at the Madison Square Garden Flower Show last fall listening to the criticisms of the crowds of people who were constantly gathered there, one could not help but notice the ever recurring remark, "Oh, those lovely red roses; those are the handsomest!" and it seemed to me that Meteor and Mme. Cusin monopolized a great share of the admiration bestowed upon the roses.

Meteor's main points of excellence are:

First, its color, which is a clear bright velvety crimson, varying considerable according to treatment, but when at its best approaching the ideal.

Second, its form, which is peculiar to itself. It is charming in the bud, but much more beautiful when cut half blown. Then the centre of the rose, which is unusually full, retains its bud form, and each of the expanded petals curving most gracefully stand out in bold individuality. Altogether the effect is most artistic.

Third, its foliage, which I think the handsomest among forcing roses, being graceful in shape, rich, dark green in color (contrasting strikingly with the crimson of the flowers), and luxuriant without being coarse.

Fourth, its flower stems, which are usually long and always straight, carrying the flower perfectly erect, and yet are light and graceful, entirely devoid of the coarseness seen in the stems of the hybrids and often in Beauty.

Fifth, its keeping qualities, for which it stands pre-eminently alone among crimson roses. The retail florists know that a Jack or a Bennett bought to-day is useless to-morrow if unsold, as the color will be gone and the flower look stale and faded. Meteor on the contrary will always be a better rose on the second day than on the day it was cut. Consequently it proves a better investment for them, as it can be bought more freely with less risk of loss if not sold immediately. This quality also places it at the head of the list of roses that can be safely shipped long distances, as it will come out of a box after a forty-eight hour journey if properly packed, almost as fresh in appearance as when first cut.

After reading the above enumeration of charms, one is led to exclaim surely here is the perfect rose; to the eye yes, perfection; but as nature seems to have an antipathy to absolute perfection, and while often approaching yet never attaining it, so in the Meteor she has left one serious fault, for alas! it is without fragrance.

Meteor is very easily propagated, the cuttings root in about three weeks and start to grow at once on being potted. It is with us a very luxuriant grower (see illustration on page 873) throwing numerous bottom shoots, and the flower buds usually come in clusters necessitating frequent disbudding. It is not a cropper but is continuously in bloom and cuts about the same average day after day. The foliage mildews easily, but is not subject to black spot or rust. If the only aim of our culture were to produce large and healthy plants Meteor would be one of the most universally successful roses on the list. But as perfect flowers are the object for which we must strive we find in this rose a most obstinate and often disappointing variety, for its tendency to produce black and deformed buds, is in many soils and under wrong conditions, insurmountable, and will probably render it of doubtful utility for the small grower. Under the most skillful treatment there is always a certain proportion of these black heads, and it is no uncommon sight to see the entire cut of some growers fit only for the ash barrel. The great risk of failure to produce perfect flowers, and the unavoidable loss of a percentage, will always keep Meteor among the high priced roses. To be profitable to the grower it should bring at least double the price of Bride, Mermet, Cusin, etc. It seems to be the general opinion that Meteor requires a higher night temperature than most of the other roses; we try never to have our houses fall below 60°. We have never grown it in but one kind of soil, which is a medium loam prepared in the usual way, a mixture of rotted sod, cow manure and bone. In this it seems to thrive. Whether this tendency to black head is inherent like bull head in the Perle, or whether more skillful treatment and better knowledge of its requirements will enable us to correct this habit, remains for the future to determine. In the mean time let us admire its beauty and regret its faults. F. R. PIERSON.

Tarrytown, N. Y.

New American Seedling Roses.

If the men specially interested in the rose and its development in America wish to make a record, and to enrich our list of forcing and other roses, would it not be well for us as a class to take seriously in hand the raising of new roses from seed? Most roses of American origin are the result of the sporting of varieties, though to be sure we have a few fine seedlings, but it is time we were enlarging our sphere of operations. By the way we point out, and dilate upon the shortcomings of varieties sent us from Europe, it would seem as if we *knew* what kind we need and in what particular way we wish our roses improved. Of course we are willing to pay for any good rose, come from where it may, but this does not remove from us the charge of being grumblers which we undoubtedly merit at least in degree. As a class we have done less, complained more, and have talked louder, than other men in other branches of our profession and until recently we haven't had grit enough to even organize a society in the interest of our chosen queen. The carnation interests are better managed, more zeal is shown, and the greatest efforts are put forth to improve this rival of the rose. Is it not time we awakened from our lethargy, or else stop fault finding.

The rose growers of Lyons as a class

are hard working, industrious and thrifty. Their methods, size of their rose grounds, and mode of procedure are so different from what we had pictured that we were not a little surprised at what we saw and learned. The first requisite for a garden of any kind at Lyons is a high stone wall rising from eight to ten, and even twelve feet, built entirely around the premises. The custom must have come down from old feudal times, when every man was of necessity the defender of his own castle and home. Admittance is gained by pulling a rachet latch which rings a bell, and announces one's arrival. Once inside and your errand made known you are treated most cordially, in fact in that charming way known only to a Frenchman. The only glass seen at Lyons in the rose establishments was a few frames to cover the seedling roses which were just springing through the ground. All increase of stock is done by summer budding. The writer failed to see any appliances for increase of the new varieties during winter. Out of some thousands of new roses imported by the writer, all were budded, no own root or grafts were ever seen. The ground does not look prepossessing, being a clay mould with—in most instances—a large percentage of small stone mixed through it, which renders it difficult of cultivation. The soil however produces a fine growth on roses. Careful inquiry revealed the fact that only in very recent years had cross fertilization been resorted to. Chance crossing by insect agency has no doubt brought results quite unexpected to the cultivator. Lacharme and Guillot are two honored names, held in esteem for their conscientious and upright methods in the dissemination of new varieties. M. Guillot, the elder, has given to the rose world Catherine Mermet, La France, Mme. Hoste, Mme. de Watteville, and several other of our most highly prized forcing roses. Levet raised our old stand-by Perle des Jardins; he also is a resident of Lyons.

Our country offers all the advantages in the way of climate and soil that are found at Lyons. We have also men equal in every respect to the French rose growers, what then is lacking? Simply application. H. G. E.

New York.

The members of the Florists' Club and their friends had a rare good time on Saturday evening, March 25, at the club headquarters. It was the fourth in the series of "Smokers" given by individual members, and in the number present and the enthusiasm manifested beat the record up to date. Mr. Ernst Asmus was the host.

Mr. Asmus never does things by halves, as his friends well know, and when the very expressive invitation was received through the mails, and a good time was promised to those who would attend the "Fumigator," as Mr. Asmus entitled it, the recipients knew just about what to expect.

The rooms were crowded, the number present being certainly not less than two hundred. In addition to the regulation supply of pipes and tobacco, each guest was provided with a little red cap which he was requested to don after checking his hat at the door. The effect of the red caps was most amusing, and it was difficult to recognize acquaintances without close scrutiny.

The mantels were banked with flower-

[CONTINUED ON PAGE 894.]

NEW AND RARE ROSES.

MME. CAROLINE TESTOUT, the popular new Rose of the year; 2 1-2-inch pots, $17 per hundred; strong, 3-inch pots, $25 per hundred.

KAISERIN AUGUSTA VICTORIA, the best new white Rose, $25 per hundred.

CHRISTINE DE NOUE, deep, rich crimson from 2 1-2-inch pots, $15 per hundred.

MARGARET DICKSON, the new white Hybrid sent out by Alexander Dickson & Sons, of Ireland, received the Gold Medal and six first-class certificates in England. Strong plants on own roots from 5-inch pots, $5 per dozen; 2 1-2-inch pots, $15 per hundred.

AMERICAN BEAUTY. We have never had a finer stock of this magnificent Rose, and offer it at $8 per hundred, $60 per thousand, from 2 1-2-inch pots. Five hundred can be ordered at the thousand rates.

ALL THE LEADING ROSES AT LOWEST PRICES.

CARNATION LIZZIE McGOWAN, the most profitable white Carnation for Florists. Rooted cuttings, $10 per thousand. Not less than 500 sold at these low rates.

ORDER NOW, AND IF YOU HAVE NOT RECEIVED OUR WHOLESALE LIST WE WILL MAIL YOU A COPY AT ONCE.

ROBERT SCOTT & SON,

PENROSE NURSERIES, PHILADELPHIA, PA.

Cor. 19th and Catherine Sts.

MADAME CAROLINE TESTOUT.

The best rose of its color in existence. It has been fully tested in the New York market and

IT SELLS.

Healthy plants from 2½-inch pots now ready. Per 100, $25 00; per 1000, $200.00; 500 at 1000 rates.

ERNST ASMUS, West Hoboken, N. J.

Mention American Florist.

FORCING ROSES.

PLACE YOUR ORDERS WITH .....

BROWN & GANFIELD,

527 WALNUT STREET. SPRINGFIELD, ILL.

And you will get the

Finest Stock on Earth.

ALL THE LEADING VARIETIES. - WRITE FOR PRICES.

ROSES. Clothilde Soupert. ROSES.

$6.00 PER 100.

Grand, healthy plants from 3-inch pots, are in splendid condition for Spring sales. We make this price to move them quickly.

MERMET, NIPHETOS, BRIDE, GONTIER, WATTEVILLE and HOSTE, from 2-inch pots, $4.00 per hundred.

DAVID CLIFFE, Germantown, Phila., Pa.

REMEMBER

FOSTITE Prevents and Checks

Mildew on Roses, and Carnation Rust.

Send for Free Book on Fostite to

C. H. JOOSTEN, 3 Coenties Slip, NEW YORK.

FORCING ROSES

Wideawake Florists will prepare now for next winter.

We make a specialty of all the leading sorts and can furnish healthy young stock to be shitted into one size larger pots on arrival at following prices:

$6 per 100 for Am. Beauty, White La France and Duchess of Albany.

$4 per 100 for Sunset, Mme. Hoste, Mme. Pierre Guillot, La France, Perle, Mme. Cusin.

$3 per 100 for Niphetos, Bride, Mermet, Bon Silene, Safrano.

Also all the famous new sorts: Bridesmaid, Mme. Testout, Kaiserin Aug. Victoria, etc. at lowest Market Prices.

Send List to be priced. Address

NANZ & NEUNER,
LOUISVILLE, KY.

ROSES

Hardy and Tender.

OVER 300 VARIETIES TO SELECT FROM.

Superb plants of **Hybrid Perpetuals**, leading varieties budded on Manetti—**Teas, Hybrid Teas, Polyantha,** &c., from 3½ and 4 inch pots. 160-page General Catalogue with illuminated cover free to all who have not received it, also Wholesale Catalogue, free.

ELLWANGER & BARRY,
MOUNT HOPE NURSERIES,
53d Year. ROCHESTER, N. Y.

ROSES

I grow all the leading forcing varieties such as

Mme. Testout, K. A. Victoria

Meteor, Wootton, Beauty, Perle, Bride, Mermet, Watteville, etc.

Let me figure on your order for May, June or July delivery, for first class stock.

MUMS. A good stock in 2-in. pots of all the leading cut flower and commercial varieties at $3.00 per 100; $25.00 per 1,000. Guaranteed true to name.

W. W. COLES, KOKOMO, IND.
Maple Hill Rose Farm.

Roses For Forcing.

VIGOROUS, CLEAN STOCK.

Out of 2 to 2½-inch pots—

American Beauty, $8.00; 3-inch, $12.00; 4-inch, $20.00 per 100.

Brides and Mermets, $4.00; 3-inch, $7.00; 4-inch, $12.00 per 100.

Hoste, Gontier, Perle, Meteor and La France $5.00; 3-inch, $8.00; 4-inch, $12.50 per 100.

Fred. Burki,
WHOLESALE FLORIST.
BELLEVUE GREENHOUSE, Allegheny Co., Pa.

The New White Rose

KAISERIN AUGUSTA VICTORIA.

From 3-inch pots, $35.00 per 100. 5-inch pots, $5.00 per dozen; $40.00 per 100.

THE NEW VIOLET ROBERT GARRETT,

The healthiest and strongest growing violet up to date; strong, well-rooted runners, $3.00 per 100; transplanted runners, $4.00 per 100. Cash with order. . . . .

JOHN COOK,
318 N. Charles St., BALTIMORE, MD.

The Sunnywoods . . . . Greenhouses

IS THE BIRTHPLACE AND FOR FIVE YEARS HAS BEEN THE HOME

——OF THE——

BRIDESMAID

A PINK SPORT, FROM THE CATHERINE MERMET.

It does not Fade in dull weather as the Mermet does.

Unlike the Waban, it has a Clear and Uniform Color and is NEVER Deformed.

IT WILL PAY YOU TO

Throw away your Mermets and to plant Bridesmaid instead.

From 2½	Pots,	50	Plants,	$ 7.50
From "	"	100	"	10.00
From 3½	"	50	"	10.00
From "	"	100	"	15.00

When Cash comes with Order, I Prepay Express.

FRANK L. MOORE,
CHATHAM, NEW JERSEY.

ing bulbs, and the ceiling, walls and chandeliers were heavily draped with the beautiful southern smilax. Much amusement was caused by the perusal of a lengthy code of "rules" for the conduct of the guests, which adorned the wall, and by the contemplation of a whole barrel of fine-cut tobacco which had been sent to Mr. Asmus with the compliments of the Idlewild Greenhouses, of Asheville, N. C.

During the process of "fumigation," entertainment in vocal and instrumental music and recitations was furnished by a corps of able artists, some of the songs and recitations being irresistably funny, and later in the evening a splendid lunch was served.

From beginning to end the affair was a continuous and unrestrained frolic. Old and young, regardless of previous reputation for sedateness, as soon as the infection had caught them, joined in the revelry and merriment with zeal and abandon such as no body of men except the proverbially light-hearted florists and gardeners could ever attempt, and when at a late hour the merry throng finally dispersed with cheer upon cheer for Mr. Asmus, every one of the fortunate participants must have felt an added pride in an organization which could develop so much of fraternal feeling and good fellowship.

Preparations for Easter are in the air everywhere, and as the stock in prospect gets into shape for closer estimates it begins to become apparent where the weak spots are and where the pinch will be felt. One thing is certain, carnations will not be over plenty or cheap, and it looks as though lilies might run pretty scarce by the time Easter morning dawns. A big trade is looked for by the retail florists if unfavorable weather does not interfere.

Over at Bay Ridge on Palm Sunday there was a stream of visitors, and the two famous Easter plant establishments of Mr. Dean and Mr. Keller experienced the customary annual inspection. Such a blaze of azaleas, such ranks of longiflorum and Harrisii lilies, such gorgeous masses of genistas and daisies as were to be seen could not be duplicated anywhere in this country. Hydrangeas do not appear to be equal to those of previous years. Easter comes a trifle early for them this time. A noticeable defect in lilies almost everywhere this years is a tendency to brown tips on the leaves. Harrisiis are said to show it more than longiflorums and the trouble is attributed by the growers to lack of proper ripening of the bulbs and to continuous cultivation in the same fields in Bermuda year after year.

John Weir & Sons' establishment at Bay Ridge is also in grand shape for Easter. Their lilies, some 5,000 pots all told, are very dwarf and perfect specimens of what pot plants should be. Gus Bennett, who returned from the west several months ago, now occupies the position of foreman at this establishment.

The enormous specimens of Pandanus utilis which have stood for so many years in Mr. Weir's greenhouse are to be shipped to Chicago in charge of Mr. Jas. Dean, as a portion of New York's floricultural display.

The Easter preparations and the Asmus "smoker" were the cause of quite an influx of visitors to the city. Among them were seen Messrs. R. Kift, G. C. Watson and W. Craig from Philadelphia, and P. Norton and W. Elliott from Boston.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

RUGGED ROSES,

Strong and Healthy.
All On Their Own Roots.

We have them, ALL the best new and all the old standard varieties. 70 houses full. They are the cheapest because the quality is the best; make up your list, and we will quote satisfactory prices. Don't forget we have plenty of other good hardy plants; send for *Wholesale list.*

The Dingee & Conard Company, West Grove, Pa.

ROSES. ROSES. ROSES.

• YOUNG • ROSES. •

LA FRANCE, MERMETS, BRIDES, HOSTE, GONTIERS, NIPHETOS, METEORS.

Beauties, Brunners, Laings and Magna Chartas.

25,000 Spring Roses, also dormant stock.

Write us for further information.

La Roche & Stahl 13th & Chestnut Sts., PHILADELPHIA.

Albany, La France

And few other varieties from COLO FRAME—in good shape. 3 and 4-inch pots, $7.00 and $9.00 per 100.

BROWN & CANFIELD, Springfield, Ill.

3,000 PLANTS
OF
Jack Roses for Sale.

2 feet, $10.00 per 100. 2½ feet, 12.00 per 100.
3 feet, $15.00 per 100.

All well branched and on their own roots.

JORDAN FLORAL CO., - St. Louis, Mo.

ROSES.

Finest stock in Northwest

Duchess of Albany,	Mme. Hoste,
La France,	Niphetos,
Catherine Mermet,	Perle,
Waban,	Sunset,
The Bride,	W. F. Bennett.

C. A. SMITH FLORAL CO,
77 7th Street, South, MINNEAPOLIS, MINN.

CLIMBING ROSES.

Two year out door grown Baltimore Belle and Prairie Queen. Finest ever grown and to close out stock will sell cheap. Write for quotations.

Z. K. JEWETT & CO., Sparta, Wis.

ROSES,

CARNATIONS AND VIOLETS,
STRONG PLANTS,
WRITE FOR PRICES.

Kemble Floral Co.,
OSKALOOSA, IOWA.

Forcing Roses.

FINE STOCK—READY TO SHIFT.

Perle, Sunset, Niphetos, Bride, Waban, Mermet, La France, Albany, Ami, Queen, $3.50; Niel, $4.00; Soupert, $4.00; Meteor, $4.50; Guinoiseau, $6.00; Beauty, $6.00; Climbing Perle, $6.00; Mme Guillot, $5.00; Garden Teas, $3.50; H. P's, $4.00; Prairies, $3.00.

Perle, Albany, La France, Niphetos, Soupert, Ami, 2½ inch strong shifted stock, $5.00.

Perle, Niphetos, Albany, La France, strong 3 inch, $7.00.

MAMMOTH VERBENAS.

Clean plants	$2.50 per 100;	$20.00 per 1000.	
Rooted cuttings	1.00 "	8.00 "	
Seedlings, to color, flats	.90 "	7.00 "	

PELARGONIUM FRED DORNER.

Very strong bud and bloom..... $10.00 per 100.

Alternantheras, P. Major etc. $25.00 pr. 1000.	$3.00 pr. 100.	
Begonias, assorted	4.00	"
Cannas, French tubers	3.00	"
Coleus, standards..... $20.00 pr. 1000.	2.50	"
Rooted cuttings	.90	"
Chrysanthemums, choicest sorts.	4.00	"
Carnations, standard	3.00	"
Centaurea, Alyssum, Lobelia	2.50	"
Pansies, from flats	1.00	"

IRISH JUNIPERS.

6 inches high, ready May 1st., $2.00 pr. 100, $15.00 pr. 1000.

Joseph Heinl,

Jacksonville, - - Illinois.

ROSA RUGOSA.

Handsome Plants, 2 to 3 feet upon own roots. Rosa rugosa, $12.00 per 100; $100.00 per 1000. Rosa rugosa alba, $13.00 per 100; $110.00 per 1000.

We have also a large stock of HYBRID PERPETUAL ROSES, leading varieties, 2 years old, all on their own roots which we offer at $10.00 per 100; $90.00 per 1000. Climbing, 2 years, strong, $7.00 per 100.

J. T. LOVETT CO., Little Silver, N. J.

ROSES

Rooted Cuttings. Young Plants.

Our Catalogue, Testimonials and Half-Tone Pictures of Kaiserin Auguste Victoria have been mailed you. If not received please notify us.

C. STRAUSS & CO., Washington, D. C.

ROSES FINE HEALTHY PLANTS FROM 2¼-INCH POTS.

Perles, Brides, Mermets, Niphetos, Papa Gontier, Hoste, Watteville, Cusin,
La France, Albany, Wootton, at . . $5.00 per 100, $45.00 per 1,000.
Meteor at . . . . . $6.00 per 100, $55.00 per 1,000.
Climbing Perle, at . . . . $10.00 per 100.

JOHN HENDERSON CO.,
FLUSHING, N. Y.

Golden Returns.

200,000 ROSES 200,000

We offer well established, healthy plants in below named and many other sorts:
From 2-inch pots, $ 3.00 per 100; $30.00 per 1000
From 3-inch pots, 6.00 " 60.00 "
From 4-inch pots, 12.00 " 120.00 "
Not in excess of any one variety.

50,000 Hybrid Perpetual Roses 50,000
at $4 per 100; $40 per 1000, in 50 select varieties.

New and Rare Varieties at Special Rates given in our Wholesale List, now ready.

WE NAME A FEW SORTS ONLY:
Aurora, Bosanquet, Comt. de Labarthe, Bon Silene, Cels, Devoniensis, C. Mermet, Etoile de Lyon, Hermosa, Mme. Cusin, H. M. Stanley, Malmaison, Marie Guillot, Mme. Lambard, Marie Lambert, Marechal Niel, Kruger, Niphetos, Mme. Jos. Schwartz, Safrano, Perle des Jardins, Sombreuil, The Bride, etc., etc.

For anything in the Florist line, or send your lists to be priced. Address

NANZ & NEUNER,
LOUISVILLE, KY.

I WILL OFFER CHEAP
FOR NEXT 30 DAYS,
The following Roses, rooted in December, and as fine and healthy stock as any grower can send out.
SEND FOR PRICES.

Bridesmaids, Brides, Mermets, Perles, **Sunsets, Niphetos, Amaryllis** of sorts, **Geraniums,** and **Florists' Seeds.**

Hydrangea grandiflora panicula, 2 years, 5 cts.
Deutzia rosea fl. pl., Climbing Roses, 2 yr. 5c.

Address **E. HIPPARD, Youngstown, O.**

ROSES

All the leading varieties of NEW and STANDARD varieties for forcing and bedding purposes in first class plants now ready. Order early and get the best from

JOHN N. MAY,
SUMMIT, N. J.

BRIDESMAID
AND OTHER
FORCING ROSES.

Send for Price List.

M. A. HUNT,
TERRE HAUTE, IND.

DILLON'S FORCING ROSES are not surpassed by any roses in the market. They are sold out of 3 and 4-inch pots and

ARE READY FOR IMMEDIATE PLANTING AFTER MAY 1ST.

Circular ready April 20th. Send for it. . . .

J. L. DILLON, Bloomsburg, Pa.

Boston.

The spring exhibition of the Massachusetts Horticultural Society has been on during the past week. Like most spring exhibitions it has been much more of a success artistically than pecuniarily. While not as extensive as some of its predecessors it has been in quality of its exhibits, the equal of any former shows. The upper hall might easily have been made to accommodate all the entries.

In the azalea section N. T. Kidder, F. B. Hayes and Dr. C. G. Weld were the principal exhibitors. Mr. Kidder's large specimens were fine trained plants four to five feet across. In orchids E. W. Gilmore, and N. T. Kidder had things about all to themselves, although F. B. Hayes took second prize for single specimen with Dendrobium Devonianum, Mr. Gilmore having been awarded first for Phalænopsis Schilleriana.

The principal competitors in stove plants and hard-wooded greenhouse plants were N. T. Kidder, C. G. Weld and J. L. Gardner. Dr. Weld's specimen Acacia cultriformis was one of the best grown plants seen in the hall for a long time. Acacia Drummondi and A. pubescens were also good. The Boronias heterophylla and megastigma were well represented in the collections of N. T. Kidder and J. L. Gardner, and Mr. Kidder also showed well grown plants of eriostemon in several species. The powerful fragrance of the boronias filled the whole building.

The Bussey Institution had no competitors in forced deciduous and evergreen shrubs. Andromedas floribunda and Japonica, Cytisus scoparius, Pyrus baccata, rhododendrons, etc., were all well represented here.

The display of cyclamens was unusually large and showy. Dr. Weld, who took the first prizes on the large groups, exhibited plants which for size, form and abundance of bloom could scarcely be excelled, but his closest competitor, Geo. M. Anderson, showed plants which were

[CONTINUED ON PAGE 898.]

ROSES.

TEAS . . . . . $30.00 per 1000
HYBRIDS . . . . . 40.00 per 1000
Healthy plants, in 2-inch pots.
Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.
Trade list on application.

Jacob Schulz,
LOUISVILLE KY.

THE ANCHORAGE ROSE CO.
Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.
SEND FOR PRICE LIST. . . . . .
ANCHORAGE ROSE CO., Anchorage, Ky.

W. C. KRICK'S
PATENT
Florists' Letters, Etc.
Highest Award wherever exhibited.
These Letters are made of the best immortelles, wired on wood or metal frames having holes drilled in them to insert toothpicks, by which to fasten them in the design. All infringements prosecuted.
2-inch Letters, $3 00 per 100.
Postage, 15c. per 100
Before purchasing send for free sample and Catalogue and compare with any other letter in the market.
W. C. KRICK, 1287 Broadway, BROOKLYN, N. Y.
Agents:—J. C. VAUGHAN, Chicago, Ill.; H. BAYERSDORFER & CO., Phila., Pa.; N. STEFFENS, N. Y.; AUG. ROLKER & SONS, N. Y.; ED. S. SCHMID, Washington, D. C.; JAMES VICK'S SONS, Rochester N. Y.; T. W. WOOD & SONS, Richmond, Va.; J. A. SIMMERS, Toronto, Ont.
Mention American Florist.

BOSTON FLORIST LETTER CO.,
13 Green Street, BOSTON, MASS.
Address all correspondence to 1 Music Hall Place.
Manufacture THE BEST LETTERS IN THE MARKET.
Sizes 1¾-inch and 2-inch, $2.00 per 100. Patent fastener with each letter.
With orders for 500 letters we give away a nicely stained and varnished box. See cut in next week's American Florist.
Our letter is handled by all the wholesalers in Boston.
AGENTS: Marschnetz & Co., 25 N. 4th St., Philadelphia, Pa.; A. Rolker & Sons, New York; F. E. McAllister, 22 Dey St., N. Y.; E. Kaufman, Philadelphia; H. Bayersdorfer & Co., Philadelphia, Pa.; A. D. Perry & Co., 33 Warren St., Syracuse, N. Y.; A. C Kendal, 115 Ontario St., Cleveland, O.; E. H. Hunt, 79 Lake St., Chicago; Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.; H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O.; T. W. Wood & Sons, 6th and Marshall Sts., Richmond, Va.; Jas Vick's Sons, Rochester, N. Y.; Dan'l B. Long, Buffalo, N. Y.; C. A. Kuehn, St. Louis.
J. A. Simmers, Toronto, Ont., Agt. for Canada.

FOR SALE.
Who? KOFFMAN.
Where? WALDEN, ORANGE CO., N. Y.
What?
Adiantum Cuneatum Plants,
from 8-in. pots for propagating, $20.00 per hundred plants.
When? FOR IMMEDIATE DELIVERY.
When writing mention the AMERICAN FLORIST.

Received March Importation of
MUSHROOM SPAWN.
Per lb. 15 cts.; 10 lbs. for $1.20; 100 lbs. $8.00.
W. W. BARNARD & CO.,
Office: 6 & 8 N. Clark St., Warehouse: 186 Kinzie St.,
CHICAGO.

Hold on!
. . . EASTER is most here, for which I offer
PALM LEAVES, PALM CROWNS, LONG NEEDLE PINES, WILD SMILAX, HARDY CUT FERNS, ETC., ETC.
H. E. Hartford,
18 Chapman Place, BOSTON, MASS.

O. H. STRONG, Chairman. H. B. BEATTY, Sec'y and Treas.

OAKWOOD ROSE GARDENS

OIL CITY, PA.

THE LARGEST GROWERS AND SHIPPERS OF ROSE BUDS IN THE WORLD!

THE PIONEER GROWERS OF THE ROSE FOR SUMMER CUT FLOWERS!

From March to December we "are in it" and you can safely tie to us for your supply; the balance of the time we take good care of our customers.

Our Roses are as good as the best and as cheap as the cheapest. Quality, not quantity is our aim, and if you want something nice for your finest trade, try us.

Regular shipments are our specialty. Direct telephone connections with the Western Union and Postal Telegraph Companies.

OAKWOOD ROSE GARDENS
OIL CITY, PA.
Mention American Florist.

ROSES. ROSES. ROSES.

Roses are and have always been our great Specialty.

Every variety worth Growing is to be found in our Daily Stock.

When a New variety is introduced WE HAVE IT. Our stock is from the best growers. For large quantities specially favorable rates can be given through the Spring months.

YOUNG BROS.,

WHOLESALE FLORISTS,

20 West 24th Street, NEW YORK CITY.

KENNICOTT BROS. COMPANY,

INCORPORATED 1893 — CAPITAL STOCK $10,000.

FLINT KENNICOTT, President. — FRED W. H. SUNDMACHER, Secretary and Treasurer.

34 Randolph Street, = Chicago.

EASTER! EASTER! EASTER!

IS WITH US AGAIN! and we offer FINE STOCK at enclosed LOW RATES.

Handling, as we do, the stock of SIXTY and UPWARDS among the BEST and LARGEST GROWERS shipping to this market, with most of whom we are connected by telephone, enables us to fill your orders with FRESH STOCK at SHORTEST POSSIBLE NOTICE; and not being GROWERS of flowers ourselves or Retailers of same, BUT COMMISSION DEALERS ONLY, we can treat ONE and ALL JUSTLY. WE SOLICIT YOUR TRADE, and at all times will give you the benefit of a fluctuating market; quoted prices often change several cents in a single day. TRY US and SEE IF WE DO NOT PLEASE YOU.

Owing to the GREAT SUCCESS of our 30 DAY cut on WIRE GOODS, we have decided to extend it for 30 DAYS MORE! 20 per cent. off our regular wire list on all orders of $5.00 and upwards. POSITIVELY UNTIL MAY 1st ONLY.

GIVE US AN ORDER.

EASTER PRICES.

TAKES EFFECT WEDNESDAY, MARCH 29, 1893.

P. & D. COST.		PER 100.
Perles, Niphetos, Gontiers	$5.00 to	$6.00
Mermets, Brides, LaFrance and Red Roses	6.00 to	8.00
Mixed Roses (our selection)	6.00 to	
Carnations, Short	1.00 to	1.50
Carnations, Long	2.00 to	2.50
Pansies	.75 to	1.00
Alyssum	.40 to	
Romans, Narcissus, Valley, Tulips and Daffs	3.00 to	4.00
Marguerites	.75 to	1.00
Violets	1.00 to	1.50
Smilax	20.00 to	
Adiantum	1.00 to	1.25
Com. Ferns per M. $2.50	.30 to	
Callas	10.00 to	15.00
Harrisii	10.00 to	15.00
Fine Dutch Hyacinths	6.00 to	8.00

We quote above prices subject to change without notice. *All Flowers* in season at lowest market price. We also receive cut flowers to be sold on commission.

STORE OPEN UNTIL 7 P. M.
SUNDAYS AND HOLIDAYS 12 M.

of a higher strain, and his specimen white which took first prize for single plant, was a beauty.

Cinerarias made a grand showing, John L. Gardner, C. G. Weld, E. S. Converse and the Bussey Institution being all large contributors, the plants all well grown and in finest variety.

The hyacinths, tulips, narcissuses and other spring flowering bulbs were as usual a prominent feature of the exhibition. Hyacinths were splendidly done, especially those in pans of ten bulbs each. Here Dr. Weld and Messrs. Gardner, Kidder and Anderson were the largest and most successful exhibitors. In tulips, W. S. Ewell & Son, and the Bussey Institution took a hand, with good results. First prize for a grand display of spring flowering bulbs was awarded to Bussey Institution, and second to W. S. Ewell & Sons. These collections were very comprehensive and contained many interesting things not often seen. The general collections from Wm. Patterson and Mary T. Goddard were also worthy of mention. The exhibitors in primulas, polyanthuses, ixias and tritonias got badly mixed and most of them were disqualified in consequence.

A collection of Primula Sieboldi, varieties and seedlings, from Rea Bros. was much admired and showed a decided advance in quality over those shown in previous years. There was a good miscellaneous exhibit from F. B. Hayes, of plants and cut flowers. A stunted sago palm brought from Japan by the gardener, Mr. Jas. Comley, attracted much attention as a curiosity. It is two feet high, irregularly branched and bears the appearance of great age. It was honored with a silver medal.

Pitcher & Manda showed a group of novelties, including Cypripedium Greyanum unicolor, Maranta Lageriana, Nephrolepis exaltata plumosa, Gynura aurantiaca and the silver leafed potato. A certificate of merit was awarded to the cypripedium. From Siebrecht & Wadley also came an interesting group of novelties in orchids and rare plants, including Tillandsia La Salliana, Dendrobium nobile delicata, and Dracæna W. A. Manda, the latter receiving a certificate of merit. J. Tailby & Son showed a remarkably fine pot plant in bloom, of rose W. A. Richardson.

The display of cut flowers was not very extensive. The rule requiring that roses be kept renewed and in good condition for four days calls for more than the size of the premiums would warrant, hence the rose growers hold aloof. First prize for Mermets and Brides went to J. Newman & Sons, and second to Peck & Sutherland. Honorable mention was given to the new rose, Mrs. W. C. Whitney, exhibited by J. N. May, and to a new rose shown by Siebrecht & Wadley. These are both deep pink roses, and very promising for cut flower purposes. Neither of them were seen at their best here, having been cut for some time.

[CONTINUED ON PAGE 900.]

Roses of Rare Excellence; strong 1 and 2-yr., outdoor grown, budded and own roots. Leading Nurserymen call them "best ever seen." Shall we express sample?

	100	1000
Climbing, 2-yr., 3 to 5 ft., own roots	$8	$70
" 1-yr., 2 to 3 ft., own roots	7	60
Hyb. P., 2-yr., 2 to 4 ft., budded or own roots	9	85
" 1-yr., 1½ to 2 ft., " " "	8	75
Mad. Plantier, 2-yr., 2 to 4 ft., own roots	8	70
" " 1-yr., 1½ to 2 ft., own roots	7	60
Moss, 2-yr., 2 to 4 ft., budded or own roots	9	85
" 1-yr., 1½ to 2 ft., budded or own roots	8	75

Evergreens, 2, 3 and 4 feet, fine. Full Stock Fruit Trees, Ornamentals—Everything! Stark Bros., Louisiana, Missouri.

Fancy. Dagger.

2,000,000
HARDY EVERGREEN CUT FERNS,
Especially for Florists' Use.
SPECIAL ATTENTION PAID TO SUPPLYING THE WHOLESALE TRADE
FIRST QUALITY HARDY CUT FERNS, $1.25 per 1000. In lots of 5000 and upwards, $1.00 per 1000.
L. B. BRAGUE, Hinsdale, Mass.

Asparagus Plumosus Nanus.
CUT STRINGS: 6 to 8 feet long, 50 cents each. 10 to 15 feet long, $1.00 each.
In large or small quantities all the year round. The largest stock in the country.
W. H. ELLIOTT, Brighton, Mass.

We are the People!
Who? KOFFMAN,
Where? WALDEN, Orange Co., N. Y.
What? SMILAX
25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.
When? ALL THE YEAR AROUND.
Also Adiantum Cuneatum Fronds At $1.25 per 100.
And he pays the Express.

PLANTS. FLOWERS.
Mendenhall, the Pioneer Florist of the Northwest, always to the front with the finest, healthiest, cleanest stock of Roses, Carnations, Smilax and all kinds of Bedding plants to be found. Prices low. Send for catalogue. Cut flowers at wholesale and retail. The pure air of Minnesota is good for man, beast and plants, and Minneapolis is the place, and Mendenhall Greenhouses is the name to address for anything good in the florist line.
MENDENHALL GREENHOUSES, MINNEAPOLIS, MINN.

Write for wholesale list.
MICHEL PLANT AND BULB CO., ST. LOUIS, MO.
Mention American Florist.

FARFUGIUM GRANDE.
First-class plants. Price $8.00 per 100; $1.25 per dozen, by mail. Postage prepaid.
TILTON BROTHERS, 222 Grove St., Aurora, Ill.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE FLORIST,
1122 PINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STEET,
St. Louis, Mo.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

GEO. MULLEN,
WHOLESALE FLORIST.
Florists' Supplies Always in Stock.
17 CHAPMAN PLACE,
(Off School St., near Parker House),
BOSTON, MASS.
Orders by Mail, Telegraph, Telephone or Express promptly filled.

A. G. PRINCE & CO.,
Wholesale and Commission
FLORISTS,
45 LAKE STREET,
In Chicago Cut Flower Exchange. CHICAGO.

WISCONSIN FLOWER EXCHANGE,
WHOLESALE
Cut Flowers AND Florists' Supplies
131 Mason St., MILWAUKEE, WIS.
Write us for prices on Harrisii and Freesia bulbs.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.
JOHN G. ESLER, See'y F. H. A., Saddle River, N. J.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.

	Per 100
Perle, Gontier, Niphetos	$ 6.00
Mermets, La France, Bride, Wootons	8.00
Meteors	8.00
Jacqs	15 00
Carnations, short	1.50
" long	2 50
" " fancy	4 00
Romans, Valley, Narcissus, Tulips	4.00
Violets, Adiantum	1.25
Callas, Harrisii	15.00
Smilax	20 00

Above are Easter prices.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
116 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.: Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange.
45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY & CO.
Wholesale and Commission
FLORISTS,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

WHOLESALE FLORISTS
La Roche & Stahl
N. E. CORNER
13th & Chestnut Sts.,
PHILADELPHIA.

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

When writing to any of the advertisers on this page please mention the American Florist.

Wholesale Markets.

Cut Flowers.

NEW YORK, Mar. 28.

Roses, Bon Silene, Gontiers	1.00@ 3.00
" Perles, Niphetos	2.00@ 4.00
" Mermet, Bride, Hoste	2.00@ 6.00
" Cusin, Watteville	2.00@ 6.00
" Bridesmaid	2.00@ 8 00
" La France	4.00@10.00
" Meteor	4.00@10.00
" Jacqueminot	6.00@12.00
" Beauty	10.00@60 00
" Morrison	15.00@20.00
" Hybrids	10.00@35.00
" Mme. Caroline Testout	10.00@20.00
Carnations	1.50@ 2.00
Valley, hyacinths, tulips, daffodils	2.00@ 3.00
Harrisii	4.00@10.00
Callas	6.00@12.00
Violets	.50@ 1.00
Cattleyas	50.00
Mignonette	2.00@ 6.00
Adiantums	1.00
Lilac (bunch)	1.00

BOSTON, Mar. 28.

Longiflorum	20.00
Harrisii lilies and callas	8.00@12 00
Candidums	8.00
Cyclamen	2.00
Spiræa Japonica, Deutzia	3.00
Lily of the valley	4 00
Tulips	4.00
Daffodils, double	4.00
Poeticus	3.00
Hyacinths and narcissus	4.00
Mignonette	2.00@ 4.00
Myosotis	2.00
Pansies	1.00
Carnations	2.00@ 3.00
Stocks	3.00
Violets	.75@ 1.00
Roses, Niphetos	6.00
" Gontier	8.00
" Perle, Sunset	8.00
" Bride, Mermet	8.00@12.00
" Jacq., Hybrids	16 00@25.00
Smilax	20.00
Adiantum	1.00@ 1.50
" Farleyense	20.00
Asparagus plumosus	50.00@75.00
Heath, per bunch ...50 to 75 cents	
English primroses, per dozen bunches ..$2.00	
Orchids, very fine, per box, $10.00, $20.00, $2 .00	
Acacia pubescens	25.00
Orange blossoms	25.00
Palm crowns, very fine, per dozen	35.00
Palm leaves	4.00
Needle pines	25.00

PHILADELPHIA, Mar. 28.

Roses, Brunners	40.00@60.00
" Lainys	30 00@40.00
" Beauties	30.00@40.00
American Belle	35.00
" Perle, Gontier, Niphetos	4.00
" Mermet, Bride, Albany	6.00@ 8.00
" La France	6.00@ 8.00
" Hoste, Cusin, Watteville	4.00@ 6.00
" Bennett, Wootton, Guillot	6.00@ 8.00
" Meteor	8.00@10.00
Valley	3.00@ 4.00
Carnations	1.00@ 2.00
Callas	12.50@15.00
Harrisii	10.00@15.00
Daffodils	4.00
Tulips	4.00@ 5.00
Freesia	1.00@ 1.50
Smilax	15.00@20.00
Asparagus	50.00@75.00
Adiantum	1.00@ 1.50

CHICAGO, Mar. 28.

Roses, Perles, Niphetos Gontier	5.00@ 6.00
" Mermet, La France, Albany	6.00@ 8.00
" Bride, Meteor	6.00@ 9.00
" Wootton	6.00@ 8.00
" Beauty, hybrids	20.00@40.00
" Jacqs	12.00@18.00
Carnations (short)	1.00@ 1.50
" (long)	2.00@ 2.50
" (fancy)	3.00@ 4.00
Tulips, Daffodils, Romans, Valley	3.00@ 4.00
Dutch hyacinths	4.00@ 8.00
Callas, Harrisii	10.00@15.00
Violets	1.00@ 1.50
Marguerites	.75@ 1.00
Smilax	18.00@25 00
Adiantum	1 00@ 1.25

WHOLESALE FLORISTS,
JOBBERS IN . . .
. . FLORISTS' SUPPLIES,
FLORISTS' VASES.
METS, BRIDES, GONTIERS, CARNATIONS, ALWAYS ON HAND.
1 Music Hall Place,
BOSTON, MASS.
HORTICULTURAL AUCTIONEERS. . .
W. F. McCarthy & Co.

SAMUEL S. PENNOCK,
Wholesale Florist
REMOVED TO REAR OF 42 S. 16th ST.,
Philadelphia, Pa.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
The finest Roses, Violets and Carnations
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

HENRY W. BAYLIS,
Wholesale Florist
940 BROADWAY,
. . . . NEW YORK.

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., BOSTON, MASS.

In carnations, Ferd. Mangold was the best crimson, Hector the best scarlet, and Mrs. Fisher the best white. These were all exhibited by E. G. Bridges. H. K Southworth's Buttercup was the best yellow, and Galvin Bros'. Princess the best pink. Jos. Tailby & Son showed a new self yellow, named Henriette Sargent which was awarded a certificate of merit. Geo. B. Gill and A. H. Fewkes both received honorable mention for their seedling carnations. Gov. Russell was shown in good shape by M. M. Cummings, Jacqueminot by Peter Fisher & Co., and R. T. Lombard's collection of seventeen varieties was very creditable.

Pansies from J. S. Fay, H. R. Southworth and Wm. Patterson were all good, also the collections of violets from N. T. Kidder, H. S. Rand and Wm. Patterson. Violet Lady Hume Campbell, as shown by these exhibitors, is very light in color, and quite different from those exhibited by other parties recently. There seems to be something uncertain about the imported stock.

The table designs in competition on the last day were all good. Mrs. A. D. Wood took first premium, and Norton Bros. second.

There were no more striking flowers in the hall than the group of sarracenias from the Botanic Garden. S. flava, Atkinsonianum, illustrata and Drummondii were the species shown.

AUBURN, N. Y.—The D. M. Dunning gardens and greenhouses on So. Division street have been leased by Messrs. Blake & Dobbs, formerly with J. N. May, of Summit, N. J.

DO YOU WANT a list of the leading cemetery superintendents? You will find such a list in our new trade directory and reference book.

WE SELL SEEDS
TO FLORISTS AND DEALERS.
WEEBER & DON,
SEED MERCHANTS AND GROWERS,
114 Chambers St., New York.
Catalogues on Application.

LILY OF THE VALLEY PIPS,
LILIUM HARRISII,
French and Dutch Bulbs.
Write for prices and Catalogues to
Hagemann & Tilzck,
GROWERS' AGENTS,
Arch & Water Sts.,
PHILADELPHIA.
GOODS ARE SOLD ON LIBERAL TERMS.
Good results can only be obtained from good bulbs.
We have them and we want your trade.

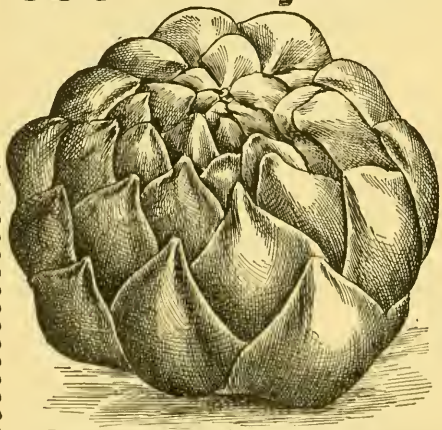
G. J. MOFFATT,
Manufacturer of
PAPER BAGS AND ENVELOPES
Special attention given to
Seed Bags and Catalogue Envelopes.
NEW HAVEN, CONN.
Mention American Florist.

TUBEROSES.
☞ We are headquarters.

	Per 100.	Per 1,000
1st size Dwarf Pearl	$1 50	$12 00
2d size "	80	6 50
1st size Tall Pearl	1 20	10 00
Gladioli, extra large, finest sorts	1 25	12 00

H. G. FAUST & CO.,
64 and 66 N. Front st., PHILADELPHIA, PA.
WOODLAWN FARMS, 1,500 ACRES.
Mention American Florist.

Lilium Auratum or Golden Japan Lily.
500 Cases just arrived direct from Japan.



In splendid condition, and ranging in size from 10 to 11 inches in circumference. Each case contains 50 BULBS, and will keep perfectly sound until June.

We regard THIS SHIPMENT as the finest we have ever IMPORTED, and you will miss a RARE OPPORTUNITY if you do not secure some of these CHOICE BULBS.

Price per case, $6.50.
5 Cases at $6.25. 10 Cases at $6.00.
25 Cases at $5.75. 50 Cases at $5.50.

100 Cases, 50 Bulbs each
Lilium Speciosum Rubrum,
Ranging in size from 10 to 12 inches in circumference. Per case, $7.00, or 5 cases at $6.75.

100 Cases, 50 Bulbs each
Lilium Speciosum Album,
Ranging in size from 9 to 11 inches in circumference. Per case, $7.50, or 5 cases at $7.25.

Also DOUBLE PEARL TUBEROSES, 4 to 7 inches in circumference at $9.50 per 1,000.

ROBERT BUIST - Importer and Grower, Warehouse—922 and 924 Market Street, Philadelphia, Pa.

There are few subjects so important in a decorative way as the new hybrid cinerarias Their brilliant and varied colors, fine habit and freedom of bloom make them exceedingly desirable, and they fill a place which is occupied by no other flower.

Much improvement has been made of late years, especially by the English growers, such men as Mr. James and Mr. Wetherill being particularly successful. Seed may be sown in early spring or during the summer. Where to get the best strain up to date is a problem which most growers wish to solve. We are so confident that we have it that we take this opportunity of letting the trade know of it and of calling *special attention* to the fact. The engraving here shown was drawn from the natural flowers, and not from imagination. The large flower is *natural size.* "The Beauties on the String" are *one-third* natural size. The affidavit of the artist (Mr. Blanc), who made a faithful and accurate picture of the flowers in his own inimitable style is appended —also the statement of the raiser of the specimen flowers from which the artist made the drawing.

What Mr. Blanc Says:

"The detached flower shown in the accompanying engraving is the exact size of the blossom, the other flowers are drawn one-third natural size. The drawing is a faithful representation of the specimens submitted to me and are NOT EXAGGERATED in the least. I was greatly charmed with these cinerarias. They were most beautiful. In fact, the finest I ever saw. There were many beautiful colors among them, besides those which I have tried to reproduce in the drawing. I have shown as many as I could in the limited space. This strain was quite a revelation to me. I could scarcely believe it possible the cineraria had reached such perfection."

(Signed) A. BLANC.

WHAT WM. J. YOUNG SAYS:

"The James & Wetherill strain of cineraria which I procured from you last August has given excellent results. The flowers are unusually large, averaging over THREE INCHES in diameter. It is the finest strain I have seen. The richness and variety of colors, all brilliant and beautiful, combined with large size of flowers and good habit, make it I think the finest strain in existence to-day. I enclose you some of the flowers and you can judge for yourselves. Your seeds, and the same quantity of seeds from three other reliable houses, were sown at the same time and grown under the same conditions side by side; but although the other strains were good they were no comparison to yours in any way."

(Signed) WM. J. YOUNG.

The flowers which Mr. Young sent us were those which we gave to Mr. Blanc to sketch for the engraving, and which he refers to in his communication. New crop seeds of the James & Wetherill strain now ready. $1.00 per trade pkt.; $\frac{1}{8}$ oz., $6.00. Free by mail. GARDINER'S CHOICE SEEDS. Cinerarias are only an instance in our magnificent assortment of choice strains a leaf which indicates the tree. Send for our new trade catalogue. It's worth looking through. GOLD MEDAL JUBILEE BEGONIAS FREE. Our Columbian Year Souvenir is the talk of the country. We mean to be remembered in this notable year in our country's history. See our trade list for particulars.

JOHN GARDINER & CO., PHILADELPHIA, PA.

LARGE CONSIGNMENT JAPAN LILY BULBS.

just arrived in splendid condition; buyers of these should note our exceptionally low prices; stock is fine. Auratum is exceedingly scarce; Lilium Lancifolium Roseum and Rubrum, $8.00 per hundred; Lancifolium Album, $12.00 per hundred; Auratum, 7 to 9 inches in circumference, $8.00 per hundred; extra selected bulbs, 10 to 11 inches in circumference, $12.00 per hundred; Lilium Candidum, $1.00 per hundred.

TRADE LIST ON APPLICATION.

F. R. PIERSON COMPANY, TARRYTOWN ON THE HUDSON, NEW YORK.

The Catalogue of Dutch Bulbs and Flower Roots

of **J. SCHILPZAND & SONS, HILLEGOM, HOLLAND,**

Is ready and can be had on application from their sole Agent,

C. RAOUX, 296 Pearl St., New York.

FOR SALE.
VIOLETS.
Marie Louise Runners: healthy stock, good plants.
HENRY HESS, - - Cockeysville, Md.

PANSIES. Strong, healthy plants from cold frames, $2.00 per 100.
G. NOACK, Batavia, N. Y.

BENJAMIN RIMBAUD, BULB GROWER,

Quartier du Temple. Toulon, var, France.
Cable address Benrimbaud, Toulon.

The largest cultures in the South of France, of **WHITE ROMAN HYACINTHS**, Narcissus Paper White grandiflora, N. Double Roman, N. **Double Von Sion**, true pure yellow, and other Daffodils. **Lilium Candidum**, the largest bulbs. Freesias. Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A. Double Rosette the earliest, etc. Prices on applicatio

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—By general greenhouse hand. Address PHILIP KIRCHNER, 349 Washington St., Williamsport, Pa.

SITUATION WANTED—In or near Chicago by a florist 23 years of age, 8 years' experience. M. BOLLINGER, 451 N. Ashland Av., Chicago.

SITUATION WANTED—As foreman or manager; 12 years' experience growing plants and cut flowers, carnations, roses, ferns, etc. Address T E. Ashbourne P. O., Pa.

SITUATION WANTED—As florist by first-class all-round man, Scotchman; single, over 20 years' experience; strictly sober; best of reference. Address FLORIST, 187 Water St., Newburyport, Mass.

WANTED—A gardener who can grow vegetables. Wages, half the profits. Give references. I. L. PILLSBURY, Macomb, Ill.

WANTED—Immediately, a single man with some experience in nursery business. Wages $30 a month. Address W. A. VANICK, Newport, R. I.

WANTED—A single man who is competent in growing roses, carnations and a general line of florists' flowers for the retail trade. Address I M., care American Florist.

WANTED—Two or three young men accustomed to general greenhouse work; good wages paid to a quick, industrious and steady man. Give references Address MCGREGOR BROS., Springfield, Ohio.

WANTED—To lease a good greenhouse establishment containing from 15,000 to 40,000 square feet of glass in first-class running condition; vicinity of New York or Chicago preferred. Address HORRISON, care American Florist.

WANTED—Immediately, sober, reliable man to assist in general greenhouse work; a permanent place to the right man. $30.00 a month and board, with prospect of a rise. Address THOS. GORDON, Mt. Clemens, Mich.

WANTED—A competent man, married, as working foreman in commercial place; must be first-class rose grower. Address, with copies of references from former employers and wages required. GROWER, Welch Brothers, 2 Beacon St., Boston.

WANTED—Soon, a competent man as a working foreman in commercial place; must be first-class grower of roses, carnations and other cut flowers. Address, with copies of references, and wages required; also give other particulars. W. L. MORRIS, Des Moines, Iowa.

WANTED—A competent man to take charge of greenhouses, to propagate and grow roses, carnations, violets, etc., for cut flowers. Also one who understands landscape gardening. Salary $35 per month and house rent free to married man, or same salary and board to single man. Address MRS. GEO. R. FRAVELL, Marion, Ind.

FOR SALE—I will sell my rooted cutting business, greenhouses, etc., at a bargain; well established, well advertised and growing. S. B. FIELD, Roselle, N. J.

FOR SALE—Unequaled opportunity for a live florist to purchase a small, well-paying established business. For all particulars address Box 452, Haverstraw-on-Hudson, N. Y.

FOR SALE—Paying florist's business, large selected stock, good patronage, home and abroad, ¾-acre lot, good dwelling, splendidly located; best reasons for selling. Address PROF. BAGLEY, Abilene, Kans.

FOR SALE—About 900 feet double thick glass 14x24; price 4c. per foot. Also 100 feet 8-inch sewer pipes; price 5c. per foot; this is less than half wholesale price. Address CHAS. E. POLLARD, 91 Warren Ave., Chicago.

FOR SALE OR TO LEASE Cut flower plant containing 35,000 feet of glass in Chicago; in first-class condition, all modern conveniences. Stock in fine condition for the World's Fair year. Address A. T. JACKSON, Bowmanville P. O., Chicago.

CLARK BROS.

Paper Seed Bags

Of every description except Lilb. Bags.

61 ANN ST., N. Y.

— 300 —

BRUGMANSIA ARBOREA WANTED.

State size and price quick.

SALZER SEED CO., LA CROSSE, WIS.

NURSERYMEN AND FLORISTS ATTENTION.

The New Strawberry Edwards' Favorite, introduced in Denver, Colo. Best and largest berry out. $3.00 per 100. Will trade some for plants, shrubs and fruit trees. Write for particulars.

DENVER CITY NURSERIES, So. Denver, Colo.

YOU CAN save money by printing your spring trade list in our columns.

EDWARD HATCH,

Auctioneer,

OFFICE, 9 CONGRESS STREET,

BOSTON, MASS.

Auction sales every Wednesday and Saturday, at 10 A. M.

SURPLUS STOCK.

Hydrangeas, Hortensia and Thos. Hogg, 2-in. strong, 4c.
" Paniculata, 5c.
Roses Hybrid Perpetual and Moss, 1½-in. strong, 3½c.
" Hardy Climbers, 5c.
Plumbago Capensis and Capensis Alba, 2-in. strong, 4c.
Cannas Emily Leclair, Adolph Wolk and Nuttonii, 5c.
Lemon Verbena, 2-inch strong, 3c.
Lantanas, in variety, 5c.
Geraniums single and double, 2½-inch strong, 3c.
Ampelopsis Veitchii, 2-inch, 1 year, 4c.
Honeysuckles, 2-inch, in variety, 3c.
Carnations, Rooted cuttings, leading varieties, $1:25 per 100.

Address THOS. A. McBETH & CO., Springfield, Ohio.

SURPLUS STOCK.

Hydrangeas, Otaksa, Thos. Hogg, 5-inch, strong, in bud, $2:50 per doz.
Anthericum Vit. Var., 4 or 5-inch, $2:00 per doz.
Callas, blooming plants, 4 to 5-inch, $1:50 doz; $10:00 100.
Begonia Sunderbruchii, in bloom, 4 or 5-inch, $2:00 doz.
Cobea scandens, 2½-inch, $4:00 per 100.
Carnation Golden Gate, best yellow, 2-inch, strong, $4:00 per 100.
Variegated Honeysuckle, 4-inch, $1:50 per doz.

H. L. PHELPS, - Springfield, Illinois.

—Prices Further Reduced.—

CAPE COD PINK POND LILY.

For price list, Plants and Cut Flowers, address the original cultivators,

CHIPMAN BROS.,
SANDWICH, (Cape Cod), MASS.

DO YOU WANT ANY?

	Per 100.	Per 1000.
Ivies English, one year old	$5 00	$40 00
Alternanthera, red or yellow	3 00	25 00
Echeveria Glauca, 2-2½-inch diam	3 00	25 00
Daisies, hardy red or white	3 00	25 00
Pansies, strong plants, good strain	3 00	25 00
Coleus, rooted Golden bedder and Verschaffeltii	1 00	7 50

Sweet Pea seed, our own growing, finest varieties mixed 65c. per pound. (Cash must accompany all orders.)

JOHN RECK, Bridgeport, Conn.

SEEDS AT WHOLESALE.

Our wholesale price list, to the trade only, of Garden, Flower and Field Seeds in bulk will be forwarded on receipt of your application. Address

CROSMAN BROS.,
ROCHESTER, N. Y.

BEST GERMAN PANSIES.

From seed bench; strong plants in 50 sorts, 75 cents per 100; $5.00 per 1000.

JOHN P. TONNER,
. . . . MONT CLAIRE, ILL.

Orders received in English, German and Danish.

ROOTED CUTTINGS.

MARIE LOUISE VIOLETS,

Healthy Stock.

Ready after March 17th.

E. P. HOSTETTER,

Manheim, Lancaster Co., Pa.

FOR SALE.

Extra fine Marie Louise Violet Clumps free from disease, 10 to 20 runners can be taken from each clump. Let me book your order now for them; price only $5.00 cash per 100 for delivery after April 1st. Be quick and speak quick.

E. KOFFMAN, Walden, Orange Co., N. Y.

When writing mention the AMERICAN FLORIST.

DO YOU WANT

BEDDING PLANTS?

Geraniums,	Alyssum,
Coleus,	Heliotrope,
Achyranthus,	Stocks,
Asters,	Lobelia,
Thyme,	Daisies,
Petunias,	Candytuft,
Vines,	Mignonette,
Alternanthera,	Begonias,
Dianthus,	Verbenas.
Feverfew,	Etc., Etc., Etc.

If so, send for prices to the

ELGIN ROSE CO.,
TELEPHONE 8.
519 Chicago Street, - - ELGIN, ILL.

ASPARAGUS PLUMOSUS NANUS.

Fine plants, from 5 to 6-inch pots...$7.00 per dozen.
Strong plants, from 4-inch pots..... 4.50 "
" " from 4-inch pots.....35.00 per 100.

CLIVIA, Splendid New Varieties.

1 and 2 year old plants, $3.00 and $5.00 per dozen. Large plants from $1.00 to $5.00 each.

ARUNDO DONAX.

Variegated, good roots, $2 00 per dozen.

EULALIA UNIVITTATA, $3.00 per 100.

CASH WITH ORDER.

ALEX. SCOTT, Lauraville, Balto. Co., Md.

* Rooted Cuttings. *

COLEUS FOR YOU ALL!

Golden Bedder and Crimson Verschaffeltii specialties, $8.00 per 1000. Fuchsias, Storm King, Moles Worth, E. G. Hill, Phenomenal, Jupiter, Black Prince, and others, $1.00 per 100. Ageratums, dwarf, blue and white, 75c per 100. Heliotrope, 4 sorts, $1.00 per 100. Few fine Standard Dwarf, $1.00 per 100, from flats $1.50. Pansies, Hybrid, Butterfly and Trimardeau, seed bed, 40c per 100; transplanted, 60c per hundred.

CASH WITH ORDER.

J. E. FELTHOUSEN,
SCHENECTADY, N. Y.

Cyclamens.

	Doz.	Hundred
Select strains, in 3½-in pots	$1.00	$8.00
H. P. Roses, Select named kinds	1.50	10.00
Dahlias, field grown, proved named	1.25	8.00
Smilax, stocky, well-hardened Seedlings, per thousand,	6.00	.75

F. A. BALLER,
BLOOMINGTON, ILL.

BOX EDGING.

We have a large stock of fine plants of all sizes. Prices upon application. Also a fine stock of **California Privet** that has been headed back and is bushy.

J. T. LOVETT CO., Little Silver, N. J.

WELL ROOTED CUTTINGS.

Lamborn, Wilder, Portia, Spray, Coleus, Stevia, Alternanthera, Tradesc. Zebrina, Violets, Lobelia, Ic. McGowan, Mrs. Mangold, Fuchsia, Ivy, Mme. Salleroi, Pelargoniums, Daisy, Calla Pink, Chrysanthemums, Feverfew ½c. Double Petunia, Rose, Bridal Wreath, L'Elegante, Ivy Geraniums, 2c. Also plants in pots, Climbing Roses, Hardy Vines.

DENVER CITY NURSERIES, South Denver, Col.

ROOTED CUTTINGS

GOOD ONES.

Verbenas, 22 varieties	per 1000, $8.00, per 100,	$ .90
Coleus, 12 varieties	"	1.00
Double Alyssum	"	.75
Chrysanthemums, 40 varieties	per doz.	.20
Fuchsias, 10 varieties	"	.20
Heliotrope, 4 varieties	"	.20
Cigar Plant	"	.20
Manettia Vine and Mexican Primrose	"	.25

I. L. PILLSBURY, Macomb, Ill.

IPOMÆA PANDURATA,

(Day Blooming Moon Flower.)

Northern grown, fresh and sound, per 1,000, $20.00, 500 at 1,000 rates; per 100, $2.50, 50 at 100 rates. Barr's Mammoth Asparagus, one year, per 1000, $2.50, Conover's Colossal, 2 years, $3.00 per 1,000.

JAMES FROST,
Greenville, Darke Co., O.

1878. **1893.**

DEAR FRIENDS.—See what we have to offer you for the coming Summer and Fall and Send your orders soon. KEEP THIS LIST FOR REFERENCE.

CHINESE NARCISSUS.

grown especially for us in the province of *Amoy*. Will be delivered in *New York, f. o. b.* at $45.00 per 1000. Time of delivery *October*. From SAN FRANCISCO in AUGUST. To Bulbs delivered from San Francisco we have to add freight to point of destination. Time gained in delivery the advantage. Of the four grades brought into the China market we handle only the FIRST and CHOICEST.

Send orders NOW to secure your stock. We do not import any of these Bulbs on speculation.

CALIFORNIA BULBS.

Calochortus, Brodiaeas, Fritillarias, Camapias
In many and choicest sorts.

These lovely forcing Bulbs are gaining so much in favor that we handled 500,000 last season—or more than double the amount of preceding year. Samples sent out in 5 and 10 of each variety FREE with any order off this list amounting to $25.00. We feel sure you will, after trying them, favor us with a large order next season. Delivery from July. ORDER NOW.

CALIFORNIA GROWN SEEDS.

Braheas, Phœnix, Chamaerops, Conifers, Smilax
In sorts *fresh* and *reliable*.

CALLAS.

Calla Ethiopica in sizes from smallest Bulblet to *Monster*.—Best size for blooming 4-5 inches and 5-6 inches in circumference. *Send order—Send order*. We control a stock of 100,000 of these Bulbs. We *guarantee sound delivery* from August on.

AUSTRALIAN TREE FERNS.

Cyathea dealbata, Cyathea medullaris, Dicksonia antarctica.
Dicksonia squarrosa, Alsophila australis, Hemetetia Smithii.
In sizes from 6 inch to 6 ft, or larger on special order.
Todea superba—*Reduced price.*
Delivery July-August. ORDER SOON.

AUSTRALIAN PALM SEEDS.

Arecas, Kentias } In sorts, *fresh and good.* Delivery July-August.
Corypha australis, Seaforthia elegans,
Araucaria Excelsa, Araucaria Bidwelli } Seeds and plants.

On hand now, *Cycas revoluta* in all sizes.

We have made extensive preparations for coming fall delivery of Japanese Bulbs.

Auratums, Rubrums, Albums, Krameri, Batemanni, Elegans or Thunbergi, Tigrinum and all other choice varieties.

Owing to failure of Aurat. crop in Japan in 1892 a good result is to be reasonably expected this season. Let us know your wants in that *line soon.*

LONGIFLORUMS.

Delivery from August. Fine solid Bulbs, one crown—no split stock. Sizes, 5-7—7-9—9-10 inches.

REMEMBER WE GUARANTEE SOUND DELIVERY,

Accidents to carriers excepted.
Your orders are filled with greatest care and precision.
Any desired information or Estimates given promptly. Address

H. H. BERGER & CO.,

19th and Folsom Sts. SAN FRANCISCO, CAL.

1878. **1893.**

ONE MILLION

FREESIA REFRACTA ALBA.

Extra Size–Selected bulbs–delivery August 1893. Large consumers will save money by getting quotations from the largest growers on the Pacific Coast.

Also Headquarters for CALLA BULBS in all sizes. DWARF CALLA, 'The Gem," L. AURATUM, home grown and Imported Native Bulbs and Tree Seeds, etc.

SHERWOOD HALL NURSERY CO.,
SAN FRANCISCO, CAL.

HULSEBOSCH BROS.,

BULB AND PLANT GROWERS,

OVERVEEN, near Haarlem HOLLAND.

Prices on application for the coming season of

ROMAN HYACINTHS. PAPER WHITE NARCISSUS.
LILY of the VALLEY. HARRISII LILIES.
LIL. LONGIFLORUM. TULIPS.
DUTCH HYACINTHS. CROCUS.
SPIRAEAS. ROSES, ETC., ETC.

☞ Spring Catalogue now ready. ADDRESS

A. HULSEBOSCH,
P. O. Box 3118. Warehouse 58 West Street,
NEW YORK CITY.

FICUS ELASTICA.

$5 00, $6 00 and $9.00 per dozen.

JOHN BURTON,
Chestnut Hill, Philadelphia, Pa.

Rooted Cuttings

of Evergreens, Hardy Flowering Shrubs and Hardy Perennials (Achillea, iberis, etc.) raised on contract for spring delivery. SEND LIST OF WANTS.

. . . ISAAC C. ROGERS, MOORESTOWN, N. J.

APRIL OFFERS.

	Doz.	100.
Carnations, Daybreak—plants	$	$5.00
Same—rooted cuttings (1,000 $25.00)	.....	3.00
Petunia, Mrs. Morton—the finest fringed double white variety in the market	1.25	8.00
Petunia, Pink Beauty—fine market sort	1.00	6.00
Petunia, Wm. Joyce—mottled; the new camellia flowered variety; fine	1.25	
Geraniums, single Grant	....	2.50
Heliotrope, Mrs. Burgess—ahead of any other dark sort for florists' use	1.00	6.00
Fuchsia, Trailing Queen (new)	1.00	6.00
Alyssum, double Tom Thumb	.60	3.00
Feverfew, Little Gem—pot grown		2.50
Violet, New Russian—hardy	.75	4 00

By mail prepaid at dozen rates; hundred rates by express not prepaid.

Do not order in value less than $1.00.

WANTED—Two-year Otaheite orange plants.
Address,

ELLIS BROS., Keene, N. H.

Asparagus Roots

	Per 100
COLOSSAL, two years old	$4.00
" one year old	3 00
PALMETTO, two years old	6.00
" one year old	5.00

Orders booked in rotation as received and roots forwarded soon as the weather will permit. Prices are for roots delivered f. o. b. Cash on receipt of the roots.

CROSMAN BROS., Rochester, N. Y.

Always mention the AMERCAN FLORIST when writing to advertisers.

NEW FRENCH CANNAS.
NEW CHRYSANTHEMUMS.

Our Specialties.

	Per 100.
Crozy's New Dwf. Cannas, 35 best sorts	$8 00
Chrysanthemums—20 Exhibition sorts, 2½ inch	4 00
Hydrangea Otaksa—strong, 5-in. pots, 1 year	4 00
" " extra strong, 4 inch pots	8 00
Hollyhocks, double—six best sorts	4 00
Fuchsias—10 best sorts, double and single	3 00
	Per Doz.
Daisies—"Snowcrest," strong, 3-inch pots	.75
Petunias—double white, "Snowdrift," 2½ inch	.10
Rose Geraniums—fine plants, 2½ inch	.50
Salvias—New dwf. scarlet, Wm. Bedman, 2½-in.	.75
Richardia Alba Maculata, strong	1 00
Calla Ethiopica—Blooming plants, 5-inch pots	1 50
Achillea—"The Pearl," fine plants, 2½-inch	.75
	Per 100. Per 1000.
Carnations—6 standard sorts, rooted cuttings	$1.50 $12.00

PAUL BUTZ & SON, New Castle, Pa.

ROOTED CUTTINGS AND PLANTS

VERY CHEAP.

Alternantheras, 4 colors, rooted cutting, per 100	$ .80
The same from 2½-inch pots, 2 in each, per 100	2.50
The same from boxes, per 100	1.50
Eulalia Japonica, 2 kinds, from 4-inch pots, each	.06
Euonymus, 3 kinds, 2½-inch pots, strong, per 100	3.00
Coleus, assorted lots, for strong plants, per 100	2.50
Water Lilies, from seed pans, per dozen	1.00
The same from 2½-inch pots, after April 15, doz.	2.50
Cape Jasmine, rooted cuttings, per 100	1.00

On all above goods 10 per cent. discount on all large orders for cash. Address

F. J. ULBRICHT, FLORIST,
P. O. Box 655 ANNISTON, ALA

Double White Primrose produces large quantities of firm white flowers, (valuable for all kinds of cut flower work), every florist should have it; 2, 3, 4, 5-in. pots @ $8, $10, $12 and $15 per 100 plants in full bloom.

Large assortment of the best Roses, Carnations Chrysanthemums, M. H. Fern, Coleus, Violets, Geraniums, etc., for florists use. Send for trade price list to

HENRY SMITH,
130 Monroe St. Grand Rapids, Mich.

How to grow Cut Flowers.

We have received advance sheets of a book bearing the above title, which will be issued vey shortly; it is written and published by M. A. Hunt, Terre Hante, Ind. Mr. Hunt's ability as a practical grower is well known, and his book is terse and to the point, giving just the information needed. Some of the subjects treated are: Greenhouse construction, ventilation, short span to the south, heating by hot water, water under pressure, steam and overhead heating. He enters very fully into the culture of the various popular florists' flowers, diseases, insect pests, and remedies. Chapters on florists' greens, cutting buds, keeping flowers, grading and packing contain valuable information which is not always easily obtainable. The usefulness of such a hand-book is beyond question; it will possess points of interest and value to experienced and inexperienced alike. It will be more fully reviewed in a later issue.

REPLYING to our correspondent who asks for information concerning the New York Market Gardeners' Association, our representative has diligently endeavored to locate these parties in New York City, both through the trade and postoffice officials, but has been unable to do so.

WE ARE INDEBTED to Mr. Grove P. Rawson, Elmira, N. Y., for the beautiful photograph of a vase of roses that appears on our title page.

DO YOU WANT a list of the leading park superintendents of America? You will find such a list in our trade directory and reference book.

"CHRYS-COLA"

ROOTED CUTTINGS COLEUS.

Ten best varieties, 75c. per 100; $6 00 per 1,000.

CHRYSANTHEMUMS. L. Boehmer, Jessica, L. Canning, Excellent, Puritan, Gloriosum, Kioto, G. P. Rawson, Mrs. Fottler, 25c. per dozen, $1.75 per 100. Mrs. E. D. Adams, Harry May, Roslyn, W. A. Manda, 60c. per dozen, $4.00 per 100.

FUCHSIAS. Black Prince, C. Blanc, W. E. Wait, Noveau Mastadonte, Minnesota, 18c. per dozen, $1.00 per 100.

S. B. FIELD, Roselle, N. J.

25,000 Carnations.

ROOTED CUTTINGS AND PLANTS.

WILDER, PURITAN, McGOWAN, PORTIA, Fisher and others.
ROSES—Leading varieties. Best strains seed for Florists and Market Gardeners.
Price List Free.

C. E. ALLEN, Brattleboro, Vt.

COLEUS AND GERANIUMS

Cuttings and potted plants.
Wholesale and Retail. . . . .

CHAS. A. BAIRD, Manalapan, Mon. Co., N. J.

Established in 1857.

C. RAOUX, New York,

296 Pearl St. P. O. Box 2938.

SOLE AGENT, in the United States, for

J. SCHIPZAND & SONS, Hillegom Holland.
Dutch Bulbs, Flower Roots and Plants, for cultivation in the open air, or under glass, etc.

EUGENE VERVAET DE VOS, Swynaerde, near Ghent, Belgium,
Azaleas, Camellias, Palms, Rhododendrons, Spirea Japonica, etc.

FRIEDR. C. POMRENCKE, Allona, Hamburg, Germany,
Convallaria Majalis for forcing, Seeds, Bulbs, etc.

C. PLATZ, & SON, Erfurt Germany,
Growers of and dealers in Flowers, Tree and Vegetable Seeds, etc.

V. LEMOINE & Son, Nancy. France,
New Plants, Pelargoniums, Clematis, Delphiniums, Lilacs, Tuberous Begonias, Gladioli, Seeds, etc:

G. BENARD, Orleans, France,
General Nursery Stocks, Trees, Shrubs, Roses, Plants of all sorts, for cultivation in the open air, or under glass.

D. DAUVESE, Orleans, France,
General Nursery Stock, Trees, Shrubs, Roses, Plants, of all sorts, for cultivation in the open air, or under glass.

F. REBUFA, Ollioules, France,
French Bulbs, Roman and Italian Hyacinths, Narcissus, Lilium Candidum, Freesias, etc.

Catalogues mailed, as soon as issued, to all applicants.

ROOTED CUTTINGS

THE LARGEST STOCK OF CARNATIONS IN AMERICA

FREE FROM RUST

DAYBREAK, $3.00 per 100; $25.00 per 1000.

We also have the Novelties and Standards, consisting of sixty varieties. Send for List.

VERBENAS: We have an extra fine collection in superb condition; all large flowering at $1.00 per 100, $8.00 per 1000.

COLEUS: We have three houses devoted to these plants; a good collection of forty-five varieties, 90 cents per 100, $7.00 per 1000.

We can supply VERSCHAFFELTII, GOLDEN BEDDER and GOLDEN VERSCHAFFELTII in large quantities.

ALTERNANTHERA: In five varieties, 90 cents per 100, $7.00 per 1000.

AGERATUM: Tapis Blue, $2.00 per 100.

HELIOTROPE: Jersey Beauty, $1.00 per 100.

HELIOTROPE: Fleur d' Ete. New White, 60 cents per dozen.

SALVIA SPLENDENS: $1.50 per 100.

VINCAS, Trailing, $1.50 per 100.

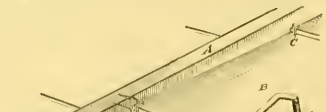
JUST WHAT YOU WANT

Stop Your Glass From Sliding by Using E. J. Van Reyper's Perfect Glaziers' Points

Endorsed by leading florists. Try them and you will use no other.

Made of Steel Wire and Galvanized.
No Rights and Lefts.

Over 8,000,000 in use.



For Sale by all Seedsmen, Hardware Dealers and Florists' Supply Stores throughout the United States. If you fail to procure them, send direct to

ESSEX HEIGHTS FLORAL CO., = BELLEVILLE, N. J.

ROOTED CUTTINGS.

SOME CUTTINGS ARE GOOD, SOME ARE NOT SO GOOD, AND SOME ARE ABSOLUTELY BAD.

My customers say that mine are good, and that they make ✳ good plants. ✳

"SEEING IS BELIEVING AND FEELING IS THE NAKED TRUTH."

If you are interested in cuttings I will send you an *HONEST* sample, so that you can see and feel them and at the same time feel me on the price for as many hundred or thousand as you need.

The following varieties I have selected as being the best of their respective colors; others in other soils and localities may be equally as good, but these I *KNOW* are good. I try almost everything that is offered and you get the benefit of the trial.

CARNATIONS.

Lizzie McGowan	**Aurora**
Puritan	**Grace Darling**
Fred Dorner	**Louise Porsch**
Portia	**Golden Triumph**
Anna Webb	**Golden Gate**
Daybreak	**J. R. Freeman**

Two Gems for 1893-

EDNA CRAIG **GRACE BATTLES.**

CARNATIONS.

FRENCH CANNAS.

Of these I have a very choice assortment, but will not have the room to grow them next season. On this account I will close my stock out very cheap. Every one I have is a good one. When I bought a variety and found it was not up to the mark it was thrown out

MY NECESSITY IS YOUR OPPORTUNITY; DON'T BE LONG IN GRASPING IT.
"IT'S THE EARLY BIRD CATCHES THE WORM."

They will be closed out at $4.50 per 100, or $35.00 per 1,000 for good, strong roots.

Smilax, $6.00 per 1,000; 75c per 100. Samples 10c. Try these.

MY DESCRIPTIVE LIST IS NOW READY. SEND FOR IT.

Correspondence Solicited. Inspection Invited.

ALBERT M. HERR,

L. B. 496. Lancaster, Pa.

A Rose Deal.

A little story that recently came to our ears regarding the new rose Maman Cochet, may serve to amuse our readers

This variety was figured and described in the *Journal des Roses* over two years ago. From the colored plate and description it won favorable opinion from a few American rose men.

A New Jersey florist offered $1,000 for the stock, but the trade fell through on account of Mr. Cochet's wishing to reserve a portion of the stock. Another firm offered $200 for the privilege of testing the variety as a winter bloomer, and $1,000 in caseit proved of promise in this particular. This offer was refused, and the rose was held awaiting a better proposition.

But alas, cold winter weather set in earlier in 1890 than usual in France and before protection could be given bold Jack Frost, who makes his own terms, took nearly the whole stock of the new rose at one bite. Only a few plants were saved from the wreck and after waiting two years to work up another stock of it the rose was again placed upon the market in the usual way and it is whispered that the financial returns were much below the offer of two years before.

W. R. SHELMIRE,

Carnation Grower,

AVONDALE, Chester Co., PA.

A FEW SPECIALTIES IN ROOTED CUTTINGS:

Mrs. Henry M. Stanley, companion of Buttercup, rich terra-cotta, shading into yellow and red, $1.50 per doz.; $10.00 per 100.

Brutus, a red sport of Cæsar; large, and of fine form, no long very stiff stems. $1.20 per doz.; $8.00 per 100.

Cæsar, variegated red and white. Large flowers on long stiff stems. Cæsar is becoming noted as a seed producer. When used as the mother, the seedlings invariably bear double flowers. 75c. per doz., $5.00 per 100.

Angelus, pink, rather darker than Wilder; large, perfect flowers and very productive; the most profitable kind we grow. 40c. per doz.; $3.00 per 100.

Nellie Bly, a fine variegated sort, never bursts. 40c. per doz.; $3.00 per 100.

Field of Gold, pure yellow, but late. 40c. per doz.; $3.00 per 100.

Chester Pride, variegated, old standard, 40c. per doz.; $3.00 per 100.

Golden Triumph, yellow variegated, 40c. per doz; $3.00 per 100.

L. L. Lamborn, pure white,	35c. a doz.;	$2.00 a 100.	
Lizzie McGowan, "	35c. "	2.00 "	
Golden Gate, new yellow.	35c. "	2.00 "	
Wm. F. Dreer, rose pink,	35c. "	2.00 "	
Anna Webb, crimson,	35c. "	2.00 "	
Pride of Kennett, crimson,	35c. "	2.00 "	
Var. La Purite, old variety,	35c. "	2.00 "	
Portia, best scarlet,	25c. "	1.50 "	
Grace Wilder, stan'd pink,	25c. "	1.50 "	
La Purite, carmine,	25c. "	1.50 "	

Send for circular for many other kinds.

Giant Double Alyssum, new, 35c. per doz.; $2.00 per 100.

Coleus, in 15 to 20 named varieties, $1.00 per 100, free by mail; $6.50 per 1000 by express.

Liberal discount on all cuttings by the 1000, or in large lots.

W. R. SHELMIRE, Avondale, Pa.

CARNATIONS

ROOTED CUTTINGS.

Send for Price List of all the leading varieties.

WM. SWAYNE,

P. O Box 226. KENNETT SQUARE, Chester Co., Pa.

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

To make room immediately I will sell extra fine transplanted stock of Lizzie McGowan and Portia

CARNATIONS

at $2.25 per 100, $18.00 per 1000

All the NEW VARIETIES at advertised prices

JOHN N. MAY, SUMMIT, N. J.

Orders Booked Now for My Specialties

FOR 1893.

New Jersey.—A scarlet Carnation hard to beat.....$12.00 per 100

Old Rose.—Old rose pink Carnation. .....$12.00 per 100

Nellie Bowden.—Pure bright yellow Canna.....$60.00 per 100

READY IN FEBRUARY.

Other varieties of Carnations, both old and new

JOHN McGOWAN,

ORANGE, N. J.

SEE OUR PRICE LIST

in special carnation number of Jan. 19th, or address

EDW. SWAYNE, Carnationist,

Kennett Square, Pa.

Rooted Carnation Cuttings.

WHOLESALE PRICE LIST NOW READY,

Containing a full list of best new and old sorts, including the Prize takers at MADISON SQUARE and PHILADELPHIA.

Address **H. E. CHITTY, Paterson, N. J.**

ROOTED CUTTINGS of CARNATIONS

By the Wholesale.

Ready now. This is the best time for intending buyers to supply themselves. offer them at moderate prices. Send for Price List. Address

JOSEPH RENARD, Unionville, Chester Co., Pa.

GRACE BATTLES

and over 60 other varieties of

CARNATIONS

offered the Wholesale Trade.

My list embraces the best Standard and New kinds, including some of particular interest to growers of seedlings. Correspondence and personal inspection solicited. **C. J. PENNOCK,**

The Pines, Kennett Square, Chester Co., Pa.

Carnation Cuttings.

Healthy stock, well rooted, ready to ship now.

Hinze's White.....	per 100,	$1.25;	per 1000,	$10.00
Grace Wilder.....	"	1.50;	"	12.50
Portia.....	"	1.50;	"	12.50
Anna Webb.....	"	2.00;	"	15.00
Lizzie McGowan.....	"	2.00;	"	15.00
W. F. Dreer.....	"	2.50;		

THOMAS DeWITT,

(Successor to DeWitt Bros.) BRISTOL, PA.

ROOTED CUTTINGS

Of the Best Old and Most Promising new varieties of

CARNATIONS.

Write for a catalogue and send list of wants for an estimate.

J. J. Styer,

CONCORDVILLE, PA.

Rooted Cuttings.

Carnations Hinze's White, Mrs. Fisher, Silver Spray, Jeannette, Grace Wilder, Fred Creighton, Mayflower, Century, Anna Webb, $1.50 per 100; $10 per 1000.

Orange Blossom, Portia, Hector, Florence, American Flag, $2 per 100; $15 per 1000.

Coleus, leading varieties, including the finest Yellow Coleus in cultivation. A new variety equal to Golden Bedder in color, and as good a grower as C. Verschaffeltii, $1.00 per 100; $8.00 per 1000.

Double Petunias in four finest varieties, $2.00 per 100.

Fuchsias, finest named varieties, $1 50 per 100.

Heliotrope $1.00 per 100.

Ageratum, Dwarf, White and Blue, $1.00 per 100.

500 at 1000 rates. Cash with order. 10 cents per 100 extra when shipped by mail.

JAMES HORAN, Florist,

BRIDGEPORT, CONN.

Mention American Florist.

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

NEW CARNATIONS.

Mrs. Elizabeth Reynolds:—bright clear pink.
Mme. Diaz Albertini:—delicate flesh pink.
Richmond:—brilliant carmine.
Wm. Scott:—deep Grace Wilder pink.
Blanche:—white.
Purdue:—deep pink.
Spartan:—deep carmine, shaded scarlet.
Dr. Smart:—pinkish cream, striped crimson.
Western Pride:—white, striped scarlet.
Wabash:—deep crimson.

Rooted Cuttings:
$10.00 per 100. $75.00 per 1000.

In 5,000 lots, prices on application. Plants from 1½ inch pots 25 per cent more. We have a large stock of the first five of the above varieties, and can supply them in large quantities.

DORNER'S SEEDLINGS.

Four New Chrysanthemums.

of sterling qualities. All receiving Certificates of Merit at Cincinnati and Indianapolis, with exception of Armida, it being too early for the Fall Shows.

ARMIDA:—Very early pure white; flowers large and full; whirled, slightly incurved. A grand variety for early cut blooms.

AUTUMN GLOW:—(Changed from Autumn Queen.) A large incurved globular flower, very full, of a light bronze or Autumn leaf color.

MRS. CHAS. DUHME:—A beautiful large white, very chaste and graceful.

SARAH HILL:—Bright golden yellow, very large and full.

PRICES TO THE TRADE:

75c. EACH. SIX FOR $4.00. TWELVE FOR $7.50. TWENTY-FOUR FOR $14.00. FIFTY FOR $25. READY NOW.

Two New Scarlet Carnations.

No. 93 ('90) is of the brightest scarlet imaginable; large flower, strong stem. Calyx never bursts.
No. 118 ('90) of the same qualities as the above, only more dwarf in growth, and the flower is a little smaller.
These varieties are a great improvement on Portia and Garfield—the parents of both. The only thing objectionable is their lateness of blooming, commencing about the 1st of March. But they are admirably adapted for Easter flowering, either as pot plants or to cut from the bench, as the bulk of the crop will come in at that time.

Price for Rooted Cuttings $10 per 100; $75 per 1,000. Stock Limited.

Mr. R. Craig being the first purchaser of these varieties has the privilege to name them.

FRED DORNER & SON,

C. W. WARD, Eastern Agent,
East Moriches, N. Y.

LaFayette, Indiana.

YES, ROSES TAKE THE LEAD BUT CARNATIONS COME NEXT.

You cannot have too many White Carnations, and you make no mistake if you invest in a few hundreds or thousands of that finest of all White Carnations the famous ∴ ∴ ∴ ∴ ∴ ∴ ∴ ∴ ∴ ∴ ∴

. . . GOVERNOR RUSSELL . . .

NOW BEING DISTRIBUTED AT THE FOLLOWING PRICES:

PER 1000, $80.00. PER 100, $10.00. 500 AT 1000 RATES. 25 OR LESS AT $2.00 PER DOZEN.

—— SOLE AGENTS ——

N. F. McCARTHY & CO., 1 MUSIC HALL PLACE, BOSTON.
C. J. PENNOCK, KENNETT SQUARE, PHILADELPHIA.
E. H. HUNT, 79 LAKE STREET, CHICAGO.
AUG. ROLKER & SONS, 136 W. 24th STREET, NEW YORK.

CARNATIONS ❋ AHEAD.

You want the best in the market! We have them, 16 Novelties of '93, and all the STANDARD VARIETIES! Send for our complete Price List.

GEORGE HANCOCK, Grand Haven, Mich.

NEW BEDDING BEGONIA
THURSTONII.
Strong plants, $1.00 per dozen; $6.00 per hundred.
J. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

SPHAGNUM MOSS. *CLEAN, DRY, FINE.* 1 Bale $1.25; 3 Bales $3.50; 10 Bales $10.00.
JOHN A. SALZER SEED CO., La Crosse, Wis.

FLORAL DESIGNS
The Cut Flower Worker's friend. Fine book of 160 pages. Send $3.50 for it, to
J. HORACE McFARLAND, Harrisburg, Pa.

Seasonable Hints.

Those who grow a general collection will now be very busy shifting most of their spring stock. Cannas and caladiums that have been started in sand should now get their last shift. Fuchsias (the earliest) will now want their last move. A 5 or 6 inch pot with us is the size. Use plenty of well rotted manure or leaf mould for fuchsias. The fall struck geraniums, a very important plant with all retail plant men, should now be shifted into 3½ or 4 inch pots and given room to spread. *Don't* use a light soil with much manure for geraniums; you want them to flower, not to produce a lot of leaves, therefore use a rather firm loam, moderately enriched, and be sure and pot *firm*. There is one plant, a very common one, the heliotrope, that should get its last shift exactly on time. I mean by that they should be so timed that they are in bloom and the foliage green just when selling time comes. If potted too soon they quickly get shabby and unsalable. They must not be allowed to stand long with their pots full of roots. With many plants this don't hurt, but with heliotropes it is most important they should never be stunted. We have a light shading now on most of the houses excepting roses and carnations. I would rather have the plants lightly shaded than be continually watering. When the ordinary run of plants want watering more than once a day there is something wrong. Much harm is sometimes done by too much shading, especially among soft wooded plants, but the great mischief is done in the spring when your houses are shaded and you drop firing too soon. It is a good many weeks before we can let fires out, and of that I will have something later to say. It will be three or four weeks yet before we can plant out our carnations. A light, airy, cool bench or a shelf is the right place to keep them till you can put them in a cold frame. W. S.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

Rooted Cuttings.

Allernantheras rooted in August, now in flats. P. Major, $6 00 per 1000. A. Nana, $5 00 per 1000. Coleus, $1.00 per 100.
Chrysanthemums, 25 first-class sorts, $1.50 per 100. Moon Vine, $2.00 per 100. Carnations all sold.

Plants In 2-inch Pots.

Coleus—$2 25 per 100.
Moon Vine—Rooted in September, strong, $3.50 per 100.
Verbenas—$3.00 per 100.
Manettia Vine—$2.00 per 100.
Alternantheras—$2.25 per 100.
Mosquito Plants—$1.00 per dozen.

HEITE FLORAL CO.,
712 LINWOOD AVENUE.
KANSAS CITY, - MISSOURI.

Tuberous Begonias.

NOW IS THE TIME TO BUY.

As long as they last we make the following prices:

	Per 100.
Single mixed	$ 4.50
" " small	3.50
" to color	6.00
Double mixed	10.00
" " small	6.00

All tubers warranted sound and healthy.

F. J. MEECH & SON,
CHARLEVOIX, MICH.

C. C. Abel & Company

P. O. Box 920, **NEW YORK,**

FLORIST'S, NURSERYMEN'S AND SEEDSMEN'S AGENTS,

—— For the following ——

WELL KNOWN AND RELIABLE HOUSES,

For whom we solicit your orders:

C. G. VAN TUBERGEN, Jr., Florist and Seedsman, Haarlem, Holland. Choice Dutch Bulbs, Novelties, etc.

PIERRE SEBIRE & SONS, Nurserymen, Ussy, France. Roses, Evergreens, Fruit and Forest stocks.

ERNST RIEMSCHNEIDER, Florist and Seedsman, Altona, Germany. Berlin Lily of the Valley a specialty.

ERNEST RIEMSCHNEIDER, Florist and Seedsman, Altona, Germany. Choice selections of German Flower Seeds. Also of Palms, Grass and Garden Seeds. Best Sugar Beet Seeds a Specialty.

Catalogues (mention which) free on application when received for distribution.
All orders for these houses should be plainly written and addressed to us.

The Snow Crest Daisy fills the bill;
Test it any way you will;
However you must grow it cold;
Then its mammoth size will hold.

Every florist should invest
In this Daisy; 'tis the best;
For design work so complete
There's really nothing quite so neat.

CUT BLOOMS, $1 PER 100, POST FREE.

Large stock fine plants all in bud and blooming, 15 for $1.00; 100 for $5.00; sample plant and bloom for 12c. Double fringed petunias, Dreer's, mixed, all colors, stock plants, 3-inch, strong, 60c. per doz.; $4 per 100; smaller from flats, $2.50 per 100; rooted cuttings, $1.10, post free. The florist double white forcing Petunia, white as the driven snow, fringed and delicately scented, valuable for cutting, design work, etc., stock plants, $1 per doz.; from flats, $8 a 100; rooted cuttings, $1.50 per 100. Double Golden Marguerites, the genuine dwarf, large flowered, stock plants, 60c. per doz., $4 per 100; smaller from flats, $2 per 100; rooted cuttings, $1.10, post free. Double Dahlia Sunflower (Helianthus multiflorus), rooted pips ready for potting, 50c. per doz., $2.50 per 100. French Cannas, Fairmount Park strain, reds in variety, dry roots ready for potting, 50c. per doz., $3 per 100; large flowered yellow, mixed, plain blotched, striped; these are extra fine showy kinds 60c. per doz. $4 per 100; a few extra fine bronze-leaved kinds, 60c. per doz. Variegated Vincas, field-grown, 3-inch, $5 per 100; small from flats, $2 per 100. Coleus, Fuchsia, Stevia, Alyssum, double and single, Gem, Feverfew and miscellaneous rooted cuttings, $1 per 100, small pts. $2 per 100. Rooted cuttings per 100 and small plants per doz. post free if desired. Safe arrival and satisfaction guaranteed or money refunded.

Address **J. C. GIBSON**, Woodbury, N. J.

TUBEROUS BEGONIAS.

Griffin's unequalled strain. The only Begonias offered that are grown out doors in America. Two first-class certificates at the last meeting of the Society of American Florists. Descriptive list free.

$6.00 per 100, $50.00 per 1,000 for first quality, large tubers, in separate colors.

This quality is better than imported Tubers at the highest prices.

J. WILKINSON ELLIOTT,
PITTSBURG, PA.

SPLENDID STOCK.

			Per 100
Althernantherns P. Major, aurea nana	2-in. pots,		$2.00
Begonias, flowering sorts	2½-in.	"	4.00
Coleus, in 12 splendid sorts	2-in.	"	2.50
Cyclamen, in bud or bloom	3½-in.	"	8.00
Chrysanthemums, 40 splendid sorts	2-in.	"	3.00
Dahlias, large roots, 36 varieties		"	5 00
Geraniums, double and single sorts	2½-in.	"	4.00
" silver leaved sorts	2½-in.	"	4.00
" ivy leaved sorts, including Jeanne d'Arc	2½-in.	"	4.00

HANS NIELSON, St. Joseph, Mo.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

Cape Flowers, new crop in best white quality at $1.25 the lb.; 10 lb. lots, $10 net.

Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 30-in. upwards, at 45c., 50c., 60c., 75c. and $1.00 each, according to length.

Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.

Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.

Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc. For prices consult our

Trade Catalogue, mailed free.

August Rölker & Sons,
136 & 138 W. 24th St., P. O. Station E. **New York.**

Siebrecht & Wadley,

ROSE HILL NURSERIES,

NEW ROCHELLE, N. Y.

Palms, ORCHIDS, Roses, and New Plants.

FRESH DRACAENA CANES NOW READY.

ORCHIDS.

The Finest Stock in the World.

SANDER'S, ST. ALBANS, ENGLAND.

Thirty minutes from London.
Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City

Orchids Cheap as Good Roses.

BRACKENRIDGE & CO.,
Established 1854. **Govanstown, Md.**
PRICE LIST FREE.

1,000,000 CANE STAKES

Look Here!

10,000 PEACH TREES, leading kinds, largely Globe and Crawford's Late.

5,000 IRISH JUNIPER, fine, 1 to 5 ft.

Siberian and American Arbor Vitæ, in car load lots, large enough to make screens as soon as planted. Prices given on application. I am in the market to sell.

W. P. BRINTON, Christiana, Pa.

Mention American Florist.

E. G. HILL & CO.,

Wholesale Florists,

RICHMOND, INDIANA.

CROZY CANNAS.

WE ARE

HEADQUARTERS

For all the Novelties, and in addition control **EXCLUSIVELY** several grand varieties which we now offer for the *first time*

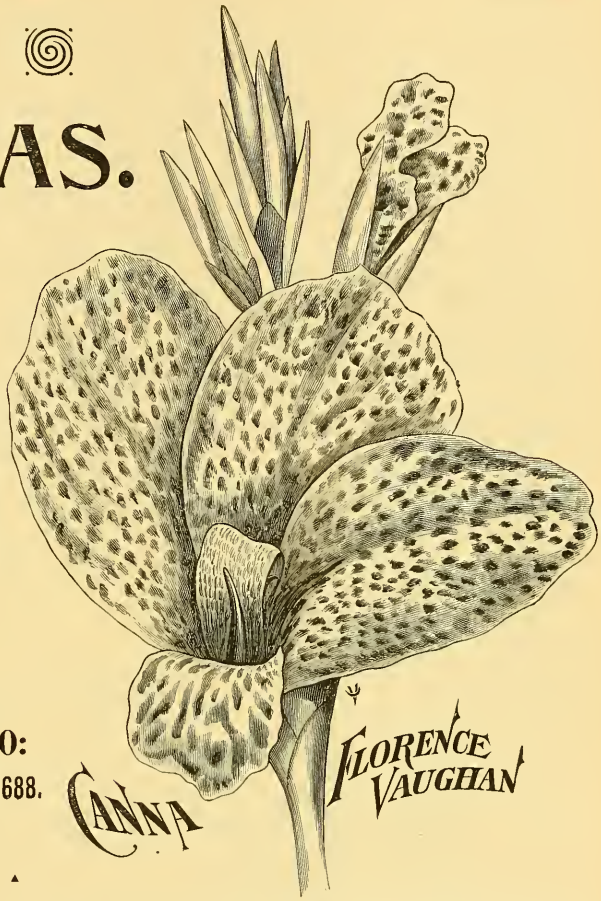
We will not be undersold on any of the list.

J. C. VAUGHAN,

New York: 26 Barclay Street.

CHICAGO: P. O. Box 688.

GREENHOUSES: Western Springs.



HOW TO GROW CUT FLOWERS.

By M. A. HUNT.

A Practical Treatise on the Cultivation of the

ROSE, CARNATION, CHRYSANTHEMUM

And Other Flowering Plants for

CUT FLOWERS.

ALSO

GREENHOUSE CONSTRUCTION.

ILLUSTRATED.

It will interest you if you love Flowers. Handsomely bound in Cloth, and sent to any address upon receipt of $2.00.

M. A. HUNT, Terre Haute, Ind.

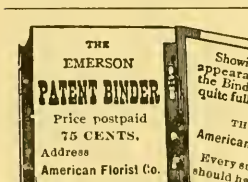
The Week After Easter.

The first week after Easter is a very busy one with the florist who grows a mixed collection. Your benches have been occupied with lilies, azaleas, spiræas, cytisus, bulbs of many kinds, and other stuff which has been disposed of now and left you the much needed room you have wanted so badly to spread out and shift, and occupy with your spring stock. The first thing to do is to dispose of a lot of plants that were cut for their flowers or perhaps loaned to churches and some of course unsold. If "order is the first law of Heaven" I am sure it is of a greenhouse and before you begin to shift or pot dispose of your old Easter stuff in one way or another, clear and clean up your benches and then you can begin your spring campaign in earnest.

If you have a few acres at your disposal and plenty of room to plant out there are several plants left over from Easter which will pay to take care of. If you have but a small space for planting your summer stock don't bother with them. Spiræa Japonica, if planted out as soon as the ground is workable, will another year give you a crop of flowers in June. It's as hardy as a "pie plant" and a little more so. Lilium longiflorum, if kept from too much drying up and planted out end of April, will be sure to give you another crop of flowers in August. Callas that have been grown in pots and show signs of another bud I keep growing, for there is a good demand for them. If no bud is promising I lay them on their sides under a cool bench where they will dry off.

Azaleas should have their withered flowers picked off and be sure and pick off the old seed pod (if left on it will much retard the young growth) and put them in a temperature of 55° at night; give them a daily syringing. This is their growing season and they will now make the shoots that bear the flowers next winter and spring.

If you save and plant out any tulips, narcissus or hyacinths, the latest forced are the best. In two years from planting you will get some decent flowers. Yet I think at the price you can buy these bulbs, when labor is all counted in, it is cheaper to let them go to the dump pile. Cytisus unsold, if not too large, should be cut back and started to grow. If large plants throw them away, they get unwieldy in size and bring but a low price. They are a poor house plant and the public have found it out; but a medium sized cytisus that you can sell at from one to two dollars is all right. W. S.



New Hardy Pink. **"HER MAJESTY."** Originator, Hopper.

This is the most promising novelty for many years. It has carried off first Honors wherever exhibited, and will be of the greatest value to the American Florists. It is far superior to anything we have in the hardy pink line. The flowers are of the purest white, with stout, long stems and the most exquisite perfume, and is a profuse bloomer.

It will be invaluable for forcing in winter, and resembles more of a Carnation.

We take great pleasure in introducing this charming novelty to the American Florists at the following price:

10 Strong Young Plants	= = =	$ 2.00
100 " " "	= = =	14.00

Address, **C. EISELE & CO.,**

8 Street Station. **11th & Jefferson Street, PHILADELPHIA, PA.**

Orders filled strictly in rotation. Cash with order,

Association "Flora"

BOSKOOP, HOLLAND.

Now on hand in New York:
CLEMATIS, 3 Years, per 100, $30.00
H. P. ROSES, for forcing, " 9.00

In the best variety, as Alfred Colomb, Anna de Diesbach, B Rothschild, Fisher Holmes, Gen. Jack. La France, Mme. G. Luizet, Mme. Plantier, Magna Charta, Paul Neyron, P. C. de Rohan, Merville de Lyon, Perle des Blanches, Ulrich Brunner and other sorts. Azaleas, Rhododendrons, Spiræas, etc We also have Palms, Dracænas, Araucarias and Bay Trees at our nurseries in Holland. Catalogue on application.

P. OUWERKERK, 206 Cambridge Ave., JERSEY CITY, N. J.

S. CRANE'S * NURSERIES.

I have Choice Fruit Trees, many in bearing sizes, Grape Vines, etc.

10,000 Shade Trees, leading kinds.
10,000 Evergreens, all sizes.
10,000 California Privet, all sizes.
2,000 Purple Beech.
500 Golden Oaks.
500 Linden.
500 Magnolias.
5,000 Climbing Vines.
10,000 Roses, extra strong.
2,000 Tree Peonies, extra strong.
2,000 White Fringe, Rhododendrons, Azaleas, and lots of other stock. Address

Established 1870. **S. CRANE, Norwich, Ct.**

ROSES.

Fine Healthy Stock.

Perle des Jardins, Bride.
Catherine Mermet, Mme. Hoste.
Sunset, Mme. de Watteville.
La France, Papa Gontier.
Mme. Cusin, Souv. de un Ami.
Niphetos, Bon Silene.
Waban.

Price from 2¼-inch pots. $5:00 per 100. $45:00 per 1000.
" " 3-inch pots in May, $8:00 pr 100. $75:00 pr 1000.

Meteor, Souv de Wootton.

From 2¼-inch pots..... $6:00 per 100
" 3-inch " .....10:00 "

Hermosa, Clothilde Soupert.

From 2¼-inch pots, fair stock..... .... $5:00 per 100.

HYBRID PERPETUAL.

General Jacqueminot, Magna Charta, Paul Neyron, Mme. Plantier and 25 other varieties ready May 15. From 5-inch pots in bud and bloom, strong, $25:00 pr. 100.

Carnations.

Puritan—Best variety for general Planting. Always Healthy and Productive.

Price, Rooted Cuttings.....$3:00 per 100. $25:00 per 1000.
" from flats..... 4:00 " 35:00 "

Aurora, Daybreak, Grace Darling, Golden Triumph, Orange Blossom.

Rooted Cuttings.....$3:00 per 100. $25:00 per 1000.

Lizzie McGowan, W. F. Dreer, Constancy, J. R. Freeman, Grace Wilder, Century, Portia.

Rooted Cuttings.....$2:00 per 100. $15:00 per 1000.

Verbenas.

Strong and Healthy

Mammoth set unsurpassed. Rooted cuttings—$1:25 per 100. $10:00 per 1000.
Mammoth set unsurpassed. 2½-inch pots—$4:00 per 100. $35:00 per 1000.
General collection. Rooted cuttings—$1:00 per 100. $8:00 per 1000.
General collection. From 2½-inch pots—$3:00 per 100. $25:00 per 1000.

Miscellaneous.

	Rooted cuttings. Per 100.	1000.
Coleus—All the best varieties named..	$1:00.	$ 8:00.
Feverfew—Dwarf Gem.....	2:00.	18:00.
Ageratum blue and white.....	1:00.	10:00.
Heliotrope, 8 best varieties.....	1:25.	10:00.
Moon Flower, true.....	2:00.	
Salvia Splendens.	1:25.	10:00.

		doz.	100.
Pandanus Utilis.	4-inch pot, strong..	$1:00.	$10:00.
	3½ " " " ..	3:50.	25:00.
	3 " " " ..	2:00.	12:00.
	2½ " " " ..	1:00.	6:00

Price list of Chrysanthemums and other stock on application.

WOOD BROTHERS,
Fishkill, N. Y.

TUBEROUS ROOTED BEGONIAS.

EXTRA LARGE BULBS. Choicest Strains, all have been raised outdoors and will grow finely in sunlight or shade. Don't be Humbugged by exaggerated descriptions or claims, for these are as fine as any in America. SEND FOR CATALOGUE.

SINGLE, in separate colors, red, white, rose and scarlet.....$5.00 per 100.
" all colors, mixed..... 4.00 per 100.

CASH WITH ORDER. Too heavy to be mailed for less than 50c per 100.

T. H. SPAULDING, ORANGE, N. J.

CHEAP NAMED DWARF FRENCH CANNAS.

There is a demand for cheap Canna stock, something that can be sold low and that is good. Having large stocks of the more valuable and higher-priced novelties in Cannas we offer the following sorts at these exceptionally low rates. Many of the varieties are worth much more than the price we charge for them and are the best of Crozy's French Cannas of the last three or four year's introduction; potted up and in bloom will meet with a ready sale and be found very profitable; will pay you to discard old stocks and substitute these. Antonin Crozy, Antoine Chantin, Admiral Courbet, Childéli, Enfant Du Rhone, Gourv, Isaac Casati, Jules Chretien, Kaiser William II, Louise Chretien, Mme. Antoinette Allamagny, Mme. Oriol, Prof. David, Petite Jeanne, Princess De Lusignan, Souv. De Jeanne Charreton, Statuaire Fulconis.

Price $7.00 per hundred; $60.00 per thousand.

F. R. PIERSON COMPANY, TARRYTOWN-ON-HUDSON, N. Y.

TO MAKE ROOM,

WE OFFER FOR A SHORT TIME. Per 100.

Begonia—Thurstonii.....$6 00
" Metallica and Lucille..... 3 00
" Rex..... 4 00
Bouvardia—(Root cut, from flats.) Elegans and Davidsonii..... 1 50
Carnations—(Well established plants from flats.) Mrs. Fawcett, L. McGowan, Grace Wilder and Garfield.. 2 00
Eucharis—Strong bulbs.....10 00
English Ivies—2-inch..... 2 00
" " 1 year, 2 to 3 feet.....10 00
Vincas—Major Variegata, 2-inch..... 3 00
Roses—La France, 1 year pot grown, wintered dormant.....10 00

J. E. BONSALL & SON, Salem, Ohio.

ROSES AND CARNATIONS.

The Largest and Finest Stock in the Northwest ever offered at the following prices:

ROSES—Perles, Hoste, Sunset, La France, Mermet, Bride, C. Soupert, Niphetos, from 2½-inch pots, $4.00 per 100
Mme. Watteville, Albany, Pierre Guillot, Meteor, from 2½-inch pots ..... 5.00 per 100
American Beauty, from 2½-inch pots..... 7.00 per 100

CARNATIONS—Silver Spray, Lizzie McGowan, Hinze's White, Hector, Portia, Garfield, Grace Wilder, Fred. Creighton, Mrs. E. G. Hill, from 2-inch pots..... 3.00 per 100
Rooted Cuttings of all varieties offered..... 2.00 per 100

Cut Flowers, Roses, Carnations Lilium Harrisii and Smilax at lowest market prices. Telegraph orders promptly attended to. CHRIST HANSEN, Wholesale Florist, ST. PAUL, MINN.

TUBERS AND YOUNG PLANTS OF TUBEROUS BEGONIAS.

We have some fine tubers left, assorted colors per 100, $6.00, smaller and mixed ones at $4.00 and $5.00, single only. Small plants, double and single ones, ready April 1st until end of May. Sent by mail for $3.00 per 100, for best single or double mixed, or $2.50 for different strains of single mixed. Order early.

BRAUER & RICHTER, McConnellsville O.

Mention American Florist.

ESTABLISHED 1838 — DREER'S SEEDS — FRESH & RELIABLE

TRY DREER'S GARDEN SEEDS,

Plants, Bulbs & Requisites. They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.

HENRY A. DREER, Philadelphia, Pa.

SPECIAL OFFERS!

SEEDS, BULBS, and PLANTS.

For Prompt Delivery.

SEEDS—The best strains of—

Primula Sin Fimbriata.

	Per 1,000.	Per 100.
Rolker's large flowering, in separate colors or mixed	$2.25	$0.35
English, large flowering, red, white, crimson and mauve	8.00	1.00

Cineraria hybr. grandifl

Covent garden mixture	per packet	.50
Large flowering French mixture	"	.50
German, dwarf, mixture "		.50

Pansy, in best mixture.

	Per oz.	Per ¼ oz.
Rolker's Superior German	$5.00	$1.00
Improved Trimardeau	6.00	1.00
Improved Cassier		1.00
Improved Bugnot		.50
The ordinary good bedding strain	.80	
White, yellow, blue, or purple, separate	1.00	

Asters.

Victoria, splendid mixture	3.00	pkt. .20
Pure white or other colors	4.00	" .20
Pæonia-flowered, finest mixture	2.00	" .20
Pure white or other colors	2.80	" .20
Reine des Halles, pure white, very early	1.50	" .20

Other Sorts—Consult our Trade List for 1893. Mailed free.

SPRING BULBS.

Begonia tuberous rooted.
Single, choicest mixed colors ..... per 100 $6.00

Gloxinia, Hybr. Crassif.
Pulcherrima strain, best mixed ..... " 7.00

Lilium Lancifolium.
Album, true, extra fine bulbs ..... " 16.00
Roseum, true, extra fine bulbs ..... " 9.00
Rubrum, true, extra fine bulbs ..... " 9.00

Pæonia Officinalis.
In finest sorts under name, partly scented, red, rosy, and white shades ..... the assorted dozen 3.00
The same in mixture of shades, ... the " 2.50

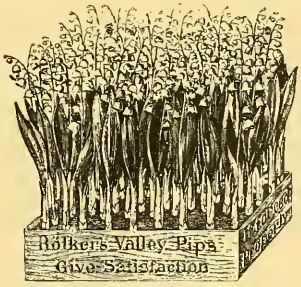
Clematis in Sorts.
Strong, three-year-old plants, the collection of Ten Plants, in ten distinct sorts, single and double flowering 5.00

Gladiolus and other Spring Bulbs.
Consult our Trade List for 1893. Mailed free.

For Fall Season.

Orders Booked Now

For delivery after arrival in the Fall season. Bulbs of
Roman Hyacinths, Paper Whites Grandiflora, Double Von Sion Narcissus, Lilium Harrisii, Lily of the Valley, forcing pips,
On all of which we offer extra low prices.



Tulips Hyacinths, and other Dutch Stuff,
Priced on application. We furnish in the fall likewise,

AZALEA INDICA.
Good healthy plants with buds set from our nurseries near Ghent, in the best market sorts of our selection, in boxes of fifty at least, at 35, 40, 50, 65, 85 cents, $1.00, $1.50, $2.50 the piece, and more, according to size. Timely orders solicited, to secure the best pick. In

PALMS. We can furnish likewise an extra fine and priceworthy stock of:

	Per doz.	Box of 50.
Latania Borbonica—from 6-inch pots.		
Four to five leaves	$15.00	$50.00
Five to six leaves	20.00	75.00
Kentia Belmoreana—from 5-inch pots.	Per doz.	Box of 50.
Three to four leaves	$15.00	$50.00
Larger plants	24.00	

Kentia Forsteriana at the same prices.

HYBRID ROSES.
The best **Dresden** grown stock of established reputation, we furnish in assorted cases:
100 in 10 sorts, 10 of a kind ..... Per Box $11.50
200 in 20 sorts, 10 of a kind ..... " 22.50
300 in 30 sorts, 10 of a kind ..... " 34.00

FOR FURTHER PARTICULARS, ADDRESS:

August Rolker & Sons, New York.

P. O. Station E. Warehouses, 136 & 138 W. 24th Street.

Chicago.

At the last meeting of the Florist Club several new members were elected. The routine business was quickly disposed of, for the long table that occupied the center of the hall looked very inviting. This was the date for the monthly supper and the members were soon gathered around the "festive board." After the eatables and drinkables had been disposed of President Hauswirth called on Mr. John Thorpe to set the ball rolling, and "Uncle John" proceeded to the work in excellent form. He called the attention of the club to the fact that no provision had been made for a competition in floral arrangement at the World's Fair and asked that it take the initial step to supply the omission. He promised to look after space needed if the florists of the country would arrange the details. He was followed by a large number of speakers who discussed ways and means and eventually a motion that the club pledge itself to see that such arrangements would be made as would enable all contestants, from whatever part of the world they might come, to meet on terms of equality as regards material needed, was carried by a unanimous vote. Many excellent speeches were made which it is to be regretted there is not space for in this issue. A feature of the entertainment was a Japanese song by Mr. H. Izawa. These monthly dinners promise to be an excellent addition to the program.

Congratulations to Mr. W. J. Smith and his bride are in order.

Mr. Elmer D. Smith, Adrian, Mich., and his wife paid Chicago a visit this week.

It is, at time of writing, a little early to say very much about the Chicago Easter market; the week opened with such bright sunshiny weather that it should have an excellent effect on the quality of the flowers, which had suffered during the dull and rainy weather of last week. Bulb stock of all classes is very plentiful, including Harrisii lilies. The general opinion is that there will be no surplus in most classes of stock, even if the supply is equal to the demand. Out of town orders have been large, usually calling for a good class of stuff. Good plant sales are anticipated, the stock consisting chiefly of spiræs, hybrid roses, callas, liliums, tulips, hyacinths, pansies and cinerarias. A large proportion of the stuff seen is very good in quality.

No Trees of 1st quality can ever be sent by mail. Mayhap you know it. By freight, prepaid if preferred, we ship safely 4, 5, or 6 ft. trees; 2-yr. Roses of rare excellence—everything! You actually pay less than for the puny stuff. 1,000 acres Nurseries. 20,000 acres Orchards. Exact information about trees and fruits. Stark Bros., Louisiana, Mo.

IRVINGTON NURSERY AND BULB FARM

	Per doz.	Per 100	Per 1000
Lucretia Dewberry, 2 years			$10 00
Kansas Raspberry, best black cap		$ 3 00	
Golden Queen Raspberry, one of the best			10 00
Catalpa seedlings, Speciosa, Kæmpferi			1 00
" " Teas' Japanese hybrid			2 00
Maple, Sugar or Rock, 10 to 18 inch seedlings			5 00
Poplar, Bolleana, new Russian, 6 to 8 feet, fine		15 00	
" **Carolina**, 3 to 5 feet, 1 year, from cutting			12 00
" " cuttings			1 25
Cinnamon Vine, 2 year tubers			25 00
Achillea "The Pearl," from pots		2 50	
Arundo Donax Variegata, 4 inch pots	2 00		
Coreopsis Lanceolata pots, fine		3 00	
Eulalia Gracillima, small, well rooted		3 50	
Helianthus Soleil d'Or, pots		3 00	
" **Multiflora plena**, pots		1 50	
" " " good plants ready for potting			6 00
Hyacinthus Candicans, 2 years medium			6 00
Double Hemerocallis, strong		2 50	
Hem. Flava, yellow day lily		4 00	
Iris Kæmpferi, beautiful mixed		6 00	
Peony, herbaceous, 25 choice named sorts		12 00	
" fine mixed sorts		8 00	
Yucca Filamentosa, 1 year, fine		4 00	
Amaryllis Formosissima, strong		8 00	
" **Johnsoni**, blooming bulbs	3 00		
" **Vallota Purpurea**, 3 and 4 inch pots	1 50		
Canna Emile Leclerc, flowers golden yellow, mottled scarlet	1 00	5 00	
" Nontonl, "Giant Cardinal Flower"	1 00	6 00	
" Oronment des Grande Ronde, fine, dark foliage and flowers	1 00	4 00	
" Papillon, flowers golden yellow, beautifully spotted crimson	1.00	4 00	
" fine mixed, from named sorts	75	3 00	
Dahlias, mixed sorts, divided roots		4 00	
Gladiolus, Lemoine's hybrids, 25 named kinds, 2d size, blooming bulbs			25 00
Oxalis Enneaphylla Alba and **Lasiandra**			6 00
" **Deppei** and **Enneaphylla Purpurea**			4 00
Pancratium (Spider Lily)		4 00	
Richardia Alba Maculata, 2½ inch pots		4 00	
Tritoma Uvaria, 1 year grown		3 00	

Complete Price List free.

E. Y. TEAS, Irvington. (near Indianapolis), **Ind.**

THE CATALOGUE OF NEW PLANTS ETC.,
OF—
V. LEMOINE & SON, NANCY, FRANCE,
Can be had on application from their sole agent,
C. RAOUX, 296 PEARL STREET, NEW YORK.

100,000 VERBENAS. THE CHOICEST VARIETIES IN CULTIVATION.

Fine pot plants $2.50 per 100; $20 00 per 1000 Rooted Cuttings, $1 00 per 100; $8 00 per 1000.

NO RUST OR MILDEW.

Packed light, and satisfaction guaranteed. Send for circular. . . .

Our sales reached nearly 250,000 last year, and we can assure our customers that our plants are fully equal, and assortment of varieties surpass those of last year.

J. L. DILLON, Bloomsburg, Pa.

ESTABLISHED 1876.

Water Lilies AND Lotus

Tubers and plants of all the choicest varieties. New yellow water lily, Nymphæa odorata sulphurea, 75c. each. N. chromatella, 1st size, $1.00 each, $10.00 per doz.; 2d size, 60c. each, $6.75 per doz. Papyrus antiquorum, strong crowns, California grown, $25 00 per 100.

WATER LILY SEEDS.

Nymphæa gracilis (new, white), $1 00 per trade pkt. Nymphæa Zanzibariensis, extra dark purple strain, 50c. pkt., $6.00 per oz. N. Zanzibar azurea, 50c. pkt., $3.00 per oz. N. Zanzibar rosea, 50c. pkt. N. dentata, 50c. pkt. Victoria regia, $2.25 per doz. Nelumbium roseum, $2.00 per 100 seeds.

RARE GREENHOUSE VINES.

Schubertia grandiflora, $5.00 per doz., $35 00 per 100. Tecoma Makeni, $1.50 per doz. Solanum Wendlandi, 50c. each. Everblooming Bougainvillea, 50c. each. Send for catalogue of aquatics.

Edmund D. Sturtevant,
BORDENTOWN, N. J.

ROOTED CUTTINGS.

Alternanthera, Versicolor, Tricolor and Aurea, Nana	per 100	.50
Alternantheras Paronychioides	"	.75
Coleus, best old and new	"	$1.00
Fuchsia, leading varieties	"	1.50
Heliotrope, leading varieties	"	1.50
Mexican Primrose	"	1.50
Parlor Ivy, variegated	"	1.50

PLANTS.

Antherieum Picturatum	per doz.	$1.00
Fuchsia, Trailing Queen	"	.75
Begonia assorted	per 100	4.00
Coleus, assorted	"	3.00
Chrysanthemums, leading kinds, our selection	"	3.00
Heliotrope, assorted	"	3.00
Petunias, double, assorted	"	4.00
Anthemus Tinctoria, a good bloomer	"	4.00
Anthemus Cormonria	"	4.00
Solanum Jasminoides Grandiflora	"	4.00
" Jasminoides var	"	5.00
Var. Parlor Ivy	"	4.00
Fuchsia, best varieties	"	3.00
" Storm King and Phenomenal	"	4.00
Echeveria Glauca	"	4.00
" Exotica Globosa, for centers, plants six inches across	each.	.25

Price List on Application.

ROBT. S BROWN & SONS,
Box 99, Kansas City, Mo.

TUBEROUS ROOTED BEGONIAS.

Best selling stock for Retail Florists. Order now and start into growth for early sales. Sell like hot cakes when in bloom. Try them if you never have. If you have, then you know it. In large quantities; choicest quality.

SINGLE, 5 separate colors, white, yellow, scarlet, pink and crimson.....$6.00 per 100; $50.00 per 1000
DOUBLE, in 5 separate colors.....$16 00 per 100. (Can be mailed for 30 ct s. per 100.

F. R. PIERSON COMPANY, TARRYTOWN ON THE HUDSON, NEW YORK.

CHEAP NAMED DWARF FRENCH CANNAS.

There are 20 good varieties that can be depended on, comprising all the ranges of color and foliage. Compare figures with any list and be convinced of their merit and low price. **5 each of the 20 varieties, $6.** Cash with order. Special figures on larger quantities.

Antonin Crozy, Admiral Courbet, Baronne de Renowardy, B. Cousanat, Chevalier Bessow, Comte H. de Choiseul, Caledoniensis, Duchess de Mortemart, E. Andre, Enfant de Caliors, F. Maire, Geoffrey St. Hilaire, H. L. de Veimorin, J. Cordioux, Jules Chrelien, M. Lefebvre, Mme. A. Alamagny, Mme. Just, Perfection, Robusta Perfecta.

T. H. SPAULDING, = = ORANGE, N. J.

ROSES

For stock and immediate sales or planting. Clean, well-grown stock in vigorous growth:

Mermets, Brides, La France and Perles, 2½-inch pots, $4.00 per 100; $35.00 per 1000
Mermets, Brides, La France and Perles, 3-inch pots, 7.00 " 60.00 "
Mermets, Brides, La France, 4 inch pots, - - - 10.00 " 90.00 "

CROTONS.

Twenty good varieties, 3-inch pots ..... $8.00 per hundred.
Twenty good varieties, 2½-inch pots ..... 6.00 per hundred.
Large plants in 5 and 6-inch pots, in quantity ..... $3 00 to $5.00 per dozen.

This in one of the best plants for dry, hot weather, and will hold color better in warm places when others burn out, than any other plants.

CHRYSANTHEMUMS.

The very best sorts for Florists' use, strong plants, 2 1-2 inch pots.

Minnie Wanamaker, Jessica, Mrs. L. C. Madeira, L. Canning, Kioto, Lilian Bird, Perle des Sales, Ivory, Mattie Bruce ..... $4.00 per 100; $35 00 per 1000
E. G. Hill, Perfection, Mrs. Geo. Bullock, Puritan, Mountain of Snow, Richard Elliott and Gloriosum ..... $3 50 per 100; $30.00 per 1000

LATANIA BORBONICA.

Strong plants, 2-inch pots ..... $5.00 per hundred; $40.00 per thousand.
Strong, 3-inch pots ..... 10.00 per hundred; 90.00 per thousand.

CRITCHELL & CO.,

CINCINNATI, OHIO.

Philadelphia.

As Easter approaches the state of business seems to have become worse. With most florists it has been the poorest week since Lent set in. Business is in some respects like the weather, which is often very good and again as often, this winter at least, very bad. The dullness at this time is no doubt like the calm before the storm, as next week promises to be a rusher.

Although flowers have been in full supply, rather too many in fact, and the demand very light prices remain much the same as last week. Valley has stiffened a little, having moved from 2 to 3; 3 to 4 is asked for Easter delivery. Prices of other flowers promise to continue at their present level, for while the demand will be large there is likely to be plenty of stock to meet it.

G. Anderson has a fine house of Brunners that will just be right.

J. W. Colflesh has the Jacq. market all to himself and his plants look very fine.

Several of the boys attended Mr. Asmus' "Fumigator" Saturday night and say they enjoyed themselves hugely. They will no doubt be fly proof for some time to come.

Griffin Bros., of Frankford, have added two new houses. Their Easter stock this season is very fine, their lilies and hydrangeas being particularly good.

George Anderson has come out on top again in the bowling tournament, having won the prize in the first class. George Campbell was first in the second, while Wm. Craig won the prize in the third class, beating his nearest competitor by only four pins. Wm. McLean won in the fourth and last class quite handily. K.

Spring Sales

in bedding stock are sure to be large and profitable this year. **Are you prepared?** If not, **we are,** to furnish you with

Rooted Coleus,

in all the best varieties, the quality of which is well known. Our stock this year is better than ever, and includes the coming yellow of yellows, ***"Sunrise."***

By the way it is not too late to buy **Carnations.** We have the best. List for the asking.

ALEX. McBRIDE,

. . . . ALPLAUS, N. Y.

MAGNOLIAS

OBOVATA GRACILIS AND PURPUREA.

Fine, bushy plants, 3 to 8 feet, from $25.00 to $200.00 per 100.

Send for descriptive catalogue and wholesale price list free to all in the trade.

SAMUEL C. MOON,

MORRISVILLE, Bucks Co., PA.

HEADQUARTERS FOR WATER-LILIES

SEED TUBERS AND PLANTS.

Place your orders early if you wish to secure good stock of charming yellow Water Lily, N. Chromatella plants. 1st size, $1.00 each, $10 doz.; 2d size, 75c each, $8.00 per doz. Also, the new French and other new hardy varieties. Send for price list.

Wm. Tricker, DONGAN HILLS, NEW YORK.

SPECIAL OFFER

—OF—

HENRY A. DREER, Philadelphia, Pa.

The following list of Stock can be furnished in almost unlimited quantity and of a very superior quality.

BULBS AND TUBERS.

Amaryllis

Formosissima . . . . $1.00 per doz., $7.00 per 100. Vittata . . . . . $2.50 per doz., $20.00 per 100.
Johnsonii . . . . . $4.00 " $30.00 "

Begonias, Tuberous Rooted.

Finest mixed singles $6.00 per 100, $50.00 per 1000. Finest mixed d'bls $1.50 per doz., $12.00 per 100.
Finest single scarlet, crimson, yellow, white, orange and pink . . . . . $1.00 per doz., $7.00 per 100.

Dahlias Per doz. Per 100.

Pompon, Snow, Cactus and single varieties in 50 finest named sorts, strong grown roots $1.50 $12.00

Dicltytra Spectabilis,

Strong clumps 1.00 6.00

Gloxinia Crassifclia. In the finest mixture.

Extra select bulbs 1.50 12.00
First size 1.00 10.00
Second size 75 8.00

Caladiums,

Fancy leaved varieties in 30 distinct named sorts 2.00 15.00

Dwarf French Cannas.

Mme. Crozy . $2.00 per doz., $15.00 per 100 Capt. P. de Suzzoni . $7.50 per doz., $60.00 per 100
Alphonse Bouvier 6.00 " 50.00 " Paul Marquant . . . . 7.50 " 60.00 "

General List of Choice Varieties.

Baron de Renowardy, Boncharlet Aine, Commandant Debois, Doyen Jo. Sisley, Duchess de Montenard, Gen. Baron Berge, Guy de Oultramont, Henri L. de Vilmorin, J. Thomayer, LaGuill, President Hardy, Secretaire Nicolas, Trocadero . . . . . $2.50 per doz., $20.00 per 100

Antoine Chantin, Ampere, Baron de Sandrans, Chevalier Besson, Comte Horace du Choiseaul, Duc de Montenard Francois Crozy, Francois Maire, Francois Lapente, Francois Corbin, Ingenieur Alphand, Jacquennet Bonnefoud, Mr. Cleveland, Mr. Lefebvre, Mme. Antoinette de Allemany, Mme. Liabaud, Princess Sussignani, Star of '91, Souv. de Jeanne Charreton, Vitticculter Gaillard, W. Pfitzer . . . . . $1.50 per doz., $12.00 per 100

Antoine Crozy, Admiral Courbet, Edward Michel, E. Chevreul, Emile Leclaire, Enfant du Rhone, Gen. de Negrier, Geoffrey St. Hilaire, Jules Chretien, Kaiser Wilhelm II., Louis Chretien, Statuair Fulconis, Segionaire . . . . . $1.00 per doz., $8.00 per 100

Clematis Paniculata.

We have prepared an immense stock of this grand variety, which will undoubtedly be in very great demand during the present season.
We offer strong three-inch pots . . . . . $2.00 per doz., $15.00 per 100

Clematis Crispa and Coccinea.

Strong dormant plants . . . . . 1.00 " 8.00 "

Clematis, Hybrid Varieties.

All the leading varieties . . . . . 30.00 "

Imported Budded Roses.

Alfred Colomb	La France	Mons. Boncenne
Alfred K. Williams	Louise Van Houtte	Paul Neyron
Anna de Diesbach	Mabel Morrison	Sweet Briar
Baron de Bonstettin	Mme. Gabriel Luizet	White Baroness
Baroness Rothschild	Magna Charta	Ulrich Brunner
Duke of Edinburg	Merveille de Lyon	Xavier Olibo
$2.00 per dozen.	$12.00 per 100.	$110.00 per 1000.

Double Petunias.

Strong 2½-inch pots . . . . . $1.00 per doz., $7.00 per 100

Carnations. Established plants from 2¼-inch pots.

Angelus	$ 5.00 per 100		Cæsar	$10.00 per 100	
Anna Webb	4.00	"	Edna Craig	15.00	"
Buttercup	6.00	"	Emily Pierson	6.00	"
Chester Pride	5.00	"	New Jersey	15.00	"
Century	4.00	"	Thos. Cartledge	8.00	"
Daybreak	5.00	"	Grace Darling	5.00	"
Grace Wilder	4.00	"	Portia	4.00	"
Hinze's White	4.00	"	Tidal Wave	4.00	"
Lizzie McGowan	4.00	"	Wm. F. Dreer	4.00	"
Mrs. Henry M. Stanley	15.00	"	L. L. Lamborn	4.00	"

Ferns.

Cyrtomium Falcatum, 2¼ in. pots,	$ 5.00 per 100		Pteris Argyrea . . . . . 2¼ in. pots,	$ 4.00 per 100	
Davallia Stricta . . . 2¼	" 6.00	"	" Palmata . . 2¼	" 6.00	"
Dicksonia Antarctica, 2¼	" 6.00	"	" Cretica Magnifica 2¼	" 5.00	"
Gymnogramme Schizophylla 2¼	" 6.00	"	" Adiantoides 2¼	" 5.00	"
Lastrea Aristata Variegata 2¼	" 6.00	"	" Serrulata Cristata 2¼	" 5.00	"
" Opaca 2¼	" 6.00	"	" Victoriæ . 2¼	" 10.00	"
Lomaria Ciliata . . . 2¼	" 5.00	"	Microlepia hirta crist 3	" 12.00	"
Polypodium Aureum . 2¼	" 5.00		Onychium Auratum . 3	" 20.00	"
			Dorcopteris Nobilis . 2¼	" 20.00	"

Palms. Decorative sizes.

Areca Lutescens . . . . . 3 plants in a 5-inch pot, 18 inches high, $9.00 per dozen.
Areca Lutescens 6-in. pots 30 in. high $12 a doz Kentia Belmoreana 4-in. pots 15 in. high $6 a doz

Latania Borbonica 5	"	18	"	6	"	"	" 5	18	" 12 "
" 6	"	20	"	9	"	" Forsteriana 4	"	18	" 6 "
" 6	"	30	"	30	"	" " 5	"	24	" 12 "
						Phœnix Reclinata 6	"	20	" 12 "

Palms. Young stock for growing on.

Areca Lutescens	2¼ in. pots,	$1.25 per doz.,	$ 8.00 per 100		
" "	2	"	2.00	"	15.00 "
" "	4	"	4.50	"	35.00 "
Latania Borbonica	3	"	1.25	"	10.00 "
Kentia Belmoreana	2¼	"	2.00	"	15.00 "
" "	3	"	3.00	"	25.00 "
" Forsteriana	2¼	"	2.00	"	15.00 "
" "	3	"	3.00	"	25.00 "
Cocos Weddeliana	2¼	"	2.00	"	15.00 "
Phœnix Reclinata	2¼	"	1.00	"	8.00 "
" "	3	"	1.50	"	10.00 "
" Sylvestris	2¼	"	1.00	"	8.00 "
" "	3	"	1.50	"	10.00 "
Pandanus Utilis	2¼	"	.75	"	6.00 "

"SPAULDING"

Offers you the Best and Cheapest Prize-Winning Varieties in the World!

CHRYSANTHEMUMS CHRYSANTHEMUMS

Well-grown plants, strong, healthy and true to name, at prices lower than rooted cuttings, which are unsatisfactory and take time to establish. Buy at once and freshen your stock, as at such prices for such collections, which contain no rubbish, nothing but choicest exhibition varieties, stock cannot last long. Your selection from one of these collections, 100 plants, 20 kinds, 5 of each, $3.50 expressed, post free, $4.00. 200 plants, 40 kinds, 5 of each from either collection, $7.00, post free, $8.00, cash with order.

COLLECTION NO. 1.

A. H. LeRoy	Col. W. B. Smith
Bouquet des Dames	H. F. Spaulding
J. H. White	Lillian Russell
Mrs. Gov. Fifer	Tuxedo
M. J. Thomas	Mrs. C. D. Avery
Shenandoah	M. J. Humbert
Dr. Callendreau	Sunflower
Domination	Kioto
M. E. Mulsen	G. F. Moseman
Popularity	Goldfinch
Goguac	Mrs. A. J. Drexel
C. Columbus	A. H. Neve
Rev. J. C. Hanna	Eda Prass
Geo. Hawkins	J. S. Fassett

COLLECTION NO. 2.

A. Ladenburg	Hicks Arnold
Chicago	E. D. Hatch
H. Balsley	Mrs. J. W. Morrissey
Mrs. W. S. Kimball	Ruth Cleveland
Jessica	Geo. Savage

Superior	M. Bahonnett
C. J. Osborne	Cæsare Costa
J. Thorpe	Gloriosum
Surprise	L. Fowler
Firebrand	A. McVickar
Miss Georgie Cole	C. Berterman
Spartel	Mrs. J. H. Wright
E. G. Hill	C. A. De Pau
Mrs. J. D. Eisler	

Those purchasing 200 will be presented with a plant of the magnificent white and dark prize-winners of 1893, Mabel Simpkins and E. Ladenburg, valued at $2.50.

100 Plants, my selection, all different, $2.00, post free, $2.25.

CANNAS

All old and new varieties at figures that will astonish you.

MME. CROZY SEED (True), per oz. 50c.

Catalogues on application.

T. H. SPAULDING
ORANGE, N. J.

CHRYSANTHEMUMS

We Offer for a Short Time the Following Standard Sorts. The Plants are in the Pink of Condition

					Per 100
W. H. Lincoln,	stock plants,		4-in pots..		$15.00
H. E. Widener,	"	"	"	" ..	25.00
Ivory,	"	"	"	" ..	25 00
Domination,	"	"	"	" ..	15.00
Mrs. Geo. Bullock,	"	"	"	" ..	15.00
L. Canning,	"	"	"	" ..	15.00
W. H. Lincoln,	"	"	2-in.	" ..	3.00
H. E. Widener,	"	"	"	" ..	5.00
Ivory,	"	"	"	" ..	4.00
Domination,	"	"	"	" ..	3.00
Mrs. Geo. Bullock,	"	"	"	" ..	3.00
L. Canning,	"	"	"	" ..	3 00
Polter Palmer,	"	"	"	" ..	5.00
Ruth Cleveland,	"	"	"	" ..	5.00
Mrs. E. D. Adams,	"	"	"	" ..	6.00
Minnie Wanamaker	"	"	"	" ..	5.00
Mrs. Irving Clark,	"	"	"	" ..	3.00
Louis Boehmer,	"	"	"	" ..	3.00
Mrs. B. Harrison,	"	"	"	" ..	3.00
Kioto,	"	"	"	" ..	3.00

Rooted Cuttings ready Feb'y 25th of the following Varieties:

Mrs. Geo. Bullock, L. Canning, Kioto, Domination, Mrs. B Harrison, Louis Boehmer, at.....$1.50 per 100
H. E. Widener, Ivory.....$2.50 per 100

25 at 100 rate. Packing free.

JOHN IRVINE CO.,
Bay City, Mich.

P. S. Adiantum Capillus Veneris, 2-inch, a fine lot now ready for shipment at $5 per 100. Nephrolepis Exaltata, 3-inch, $7 per 100.

Mention American Florist.

CHRYSANTHEMUMS

The Cream of all the immense list selected with great care for use of Florists, also all the NEW ONES of this year in first-class stock, now ready.

JOHN N. MAY,
Summit, N. J.

CHRYSANTHEMUMS.

NOVELTIES AND STANDARD VARIETIES.

Lowest price on application.

NATHAN SMITH & SON,
167 W. Maumee Street, ADRIAN, MICH.

CHRYSANTHEMUMS.

ROOTED CUTTINGS.

Lincoln, Ada Spaulding, Domination, L. Boehmer, Robaillon and 20 other good market sorts, $1.50 per 100; Jessica and Ivory, $2.50 per 100. Ready for delivery January 15th.

Address **J. G. BURROW,**
FISHKILL, N. Y.

Mention American Florist

Are You a Fruit or Flower Raiser? For Market or Pleasure—

If so, send for our Circular on Fungicides and Insecticides, which are **cheap** and **reliable**. Agents in every State. **Special Fertilizers** for Fruits, Flowers and Vegetables. Agricultural Chemicals. W. S. POWELL & CO., Chemical Fertilizer Manufrs, Baltimore, Md.
S. F. LEONARD, Seedsman, Agent, Chicago, Ill.

St. Louis.

Trade during the past week continued fair, the shipping being especially good. Orders are being placed quite liberally for an Easter supply, which from present indications will be filled. The plant trade will be somewhat behind, owing to many of the growers having been unable to gauge correctly the time required to bring their plants into flower. This holds true especially for lilies and hydrangeas. Some of the firms have a large stock of lilies that will be available, but hydrangeas, with but one, or possibly two exceptions, will be behind time. This was recognized some time ago and they are being brought on slowly for spring plant trade. Azaleas and spiræas will be in good supply, almost all having them in good shape.

Quite a supply of palm crowns, needle pines, and wild smilax is being shown by the supply men, but they say the people do not take to them. When used judiciously these make a very effective addition to any decoration, the palm crowns especially lending a gracefulness to the general effect.

A meeting of the finance committee has been called looking towards the entertainment of the S. A. F. This committee consists of the chairmen of the various sub-committees, and the superintendent of the trade display. From the interest manifested by those who have been placed on committees, and even those who have not, the S. A. F. can be sure of a hearty reception this summer. It is expected that at the above meeting all the chairmen will outline their plans and then get down to business.

There is considerable talk among the members in regard to organizing a bowling club, so as to be able to participate in the pleasure annually enjoyed by the teams from the cities already having established clubs. Several parties expect to bring the matter forward at the next meeting, and it will be a surprise if something does not come from it.

Mr. William Ellison, one of our longest established retail store men, has within the past week disposed of his retail store trade, having sold it to the Ayers Floral Co., they at present being located on Easton Avenue, near Grand Ave. They will in the future run the two stores.

R. F. T.

DO YOU WANT an alphabetical list of the chrysanthemums in commerce in America, with class and a brief accurate description of each one, and synonyms noted? You will find such a list in our new trade directory and reference book.

PLEASE WRITE on your printed letter head when addressing our advertisers. If you have no printed letter head, then enclose your business card or bill head.

IF YOU NEED ANY

Cape Flowers, Immortelles, Grasses, plain or fancy **Baskets, Metal Wreaths, Letters, Doves,** or any other thing in the Florists' supply line, mail us your order.

REMEMBER WE ARE THE

Leading Manufacturers of Wheat Sheaves and Baskets, and Importers of **Florists' Supplies.**

Catalogue on application. . . .

ERNEST KAUFMANN & CO.,

113 N. 4th Street, PHILADELPHIA, PA.

BAYERSDORFER'S

Elegant Goods for Spring Trade.

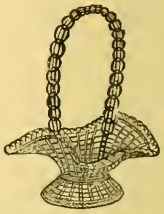
A FULL LINE OF

FLORISTS' · SUPPLIES.

Baskets all Shapes and Materials.

Commencement Baskets,

Silver Baskets,



All prices, from 25 cents to $4.00 each.

Celluloid Baskets.

New Flower Pots and Jardinieres

of Majolica with Metal Decorations.

FERNERIES . . . .

From

75 cents to $10.00 each.

DECORATION DAY SUPPLIES.

METAL WREATHS AND DESIGNS.

Metal Designs made to order in any form or quantity and at any price.

Fresh Cape Flowers, Immortelles and Dried Grasses, Wheat Sheaves, Cycas Leaves & Doves.

We Sell to the Trade only. Price Lists on Application.

H. BAYERSDORFER & CO.

Importers and Manufacturers of

Florists' Supplies,

56 N. Fourth St., PHILADELPHIA, PA.

BASKETS FOR ROSES

My Seasonable Novelties in this stock are unequalled.

FOR TWENTY YEARS

I have not only supplied the best in all the standard kinds, but I have

ORIGINATED THE STYLES.

I am still doing business at the old stand. I do not print a Catalogue, but ask you for a sample order from my incomparable stock. It may be any amount you choose and I promise the selection shall be

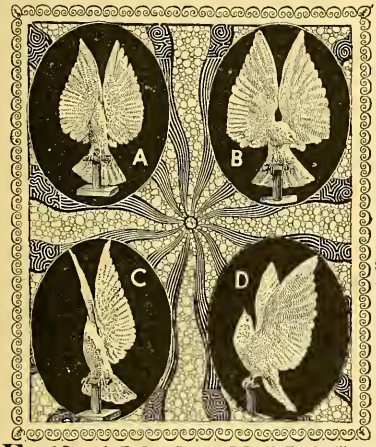
UP TO DATE!

ED. JANSEN,

124 WEST 19TH STREET, NEW YORK.

Look for my exhibits at the World's Columbian Exposition.

Doves. Doves.



I have Doves.

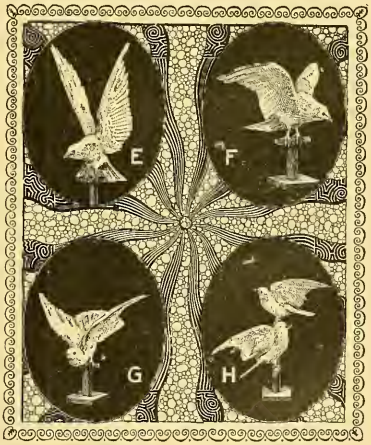
I have lots of Doves.

I have lots of good Doves.

First Quality.....$14.00 a doz.
Second Quality..... 12.00 "
Extra Selected..... 15.00 "

10 per cent. off on orders of two dozen or more.

S. J. RUSSELL,
103 Van Winkle Street,
JERSEY CITY, N. J.



FOR SALE BY F. E. McAllister, New York; Ed. Jansen, New York; A. Herrmann, New York; N. Steffens, New York; Reed & Keller, New York; W. C. Krick, Brooklyn, N. Y.; H. Bayersdorfer & Co., Philadelphia, Pa.; Ernst Kauffman, Philadelphia. Pa.; C. Ribsam & Sons, Trenton, N. J.; J. M. McCullough's Sons, Cincinnati, Ohio; B. P. Critchell & Co., Cincinnati, Ohio; J. C. Vaughan, Chicago, Ill.; Wisconsin Flower Exchange, Milwaukee, Wis.; Currie Bros., Milwaukee, Wis.; C. A. Kuehn, St. Louis, Mo.; S. Mount & Co., St. Louis, Mo.; C. Young & Sons Co., St. Louis, Mo.; Jordan Floral Co., St. Louis, Mo.; C. Strauss & Co., Washington, D. C.; Ed. S. Schmid, Washington, D. C.; G. W. Currey & Co., Nashville, Tenn.; Eckhardt & Co., Nashville, Tenn.; T. W. Wood & Sons, Richmond, Va.; U. J. Virgin, New Orleans, La.

MARSCHUETZ & CO.,
FLORISTS' • SUPPLIES
23 & 25 N. 4th St., PHILADELPHIA, PA.
Send for Catalogue.

Easter Decorations
will be enhanced vastly by using
GREEN SILKALENE for stringing.
Send for Samples and prices.
JOHN C. MEYER & CO.,
289 Devonshire St., BOSTON, MASS.

U. S. AND FOREIGN **PATENTS** Trade Marks, Designs, Opinions, Searches, &c., promptly attended to. Send sketch or model for free examination as to patentability. All work strictly confidential.
GEO. H. CHANDLEE,
Atlantic Building, WASHINGTON D. C.
Mention American Flor st

Toronto.

The great event in horticultural circles this week was the third annual dinner of the Gardeners' and Florists' Association. The boys turned out in good style, about seventy of them being present, and all agreed that a more enjoyable social jollification never occurred. Speeches were brief and to the point, songs were lively and well sung, the "wittles and drink" were substantial and well served, the cigars were fragrant and good. What more could a lot of fellows, who had made up their minds beforehand to have a good time, want? Regret was expressed that none of our American cousins—brethren, I will say—were present; it was hoped until the last minute that the original and only Great Scott would turn up, but no such luck. Mr. S. Aylett, president of the Hamilton club, was the only outside representative; brother F. G. Foster does not usually leave us out on these festive occasions, but it was whispered that the arrival of another little Foster was the cause of his absence. A feature of the evening was a trio by Messrs. Gilchrist, Tidy and Dunlop to the tune of "Auld Lang Syne." I hope to be able to send you the words of this song shortly; all I could catch of the chorus was "Bullheads, they will not sell." The toast of the S. A. F. was drunk with great enthusiasm and was responded to by Mr. J. H. Dunlop. Mr. W. Muston did similar duty for the Carnation Society. In responding to "our profession" Mr. A. Gilchrist took serious exception to the word "stuff" being used and warned his fellow florists that as dispensers of truck were called truckers, so dispensers of "stuff" would very likely come to be called "stuffers," and wanted to know how they would like to have it "John Smith, the noted Toronto stuffer," "Charles so and so, THE stuffer," and so on. Various changes were rung on this word during the evening which created much amusement. Mr. G. Reeves also replied to this toast by a good speech. "Parks and Gardens" was replied to by Superintendent John Chambers, Alderman Orr and ex-Alderman R. J. Score. Various other toasts were responded to by good speeches, being interspersed with songs and some really very fine concertina playing by one of the members. The meeting broke up in the "wee sma' hours" and everyone having a satisfied smile on his countenance.

Owing to the weather, which keeps at about freezing point, sometimes snowing and sometimes raining, always raw and windy, the World's Fair horticultural exhibit has not progressed much this week and Messrs. Ewing and Houston are wearing their pants out praying for fine weather, but they hope to send it off on or about the 30th inst. and start themselves on the same day.

Florists are all busy making great preparations for the Easter trade, which promises to be good, considering the dull state of trade generally that prevails in this city just now, owing to the effects of a recently defunct real estate boom. E.

IF YOU have not already ordered a copy of our directory and reference book you are missing a good thing that you ought to have. Remember that it contains not only a list of those in the trade but a vast amount of reference matter of great value to every reader of the FLORIST. The reference lists of roses, chrysanthemums and carnations are alone worth the price of the book.

Hammond's Concentrated Extract of Tobacco.

Its Effectiveness when Applied as Vapor in Destroying Green Fly.

Cleanly, Thorough, Effective, Quick, Economical.

A Few Words from Mr. May.

JOHN N. MAY,
Rose Grower,
P. O. BOX 7.

SUMMIT, NEW JERSEY, January 10th, 1893.

MR. BENJAMIN HAMMOND,
Fishkill-on-Hudson, New York.

MY DEAR SIR: In reply to your inquiry regarding the **Concentrated Tobacco Extract** I purchased from you, would say that we have found it very satisfactory indeed. Our modus operandi is to take a small upright tub about twelve inches deep and as much in diameter; across the top of this tub we have a piece of board about three inches wide nailed on, with a hole in the center large enough to admit a piece of quarter-inch pipe. This pipe is about fifteen inches long, and one end of it is fastened securely into the end of a piece of half-inch hose, on the other end of which is fastened a half-inch socket coupling, which is attached to the outlet of the steam pipe, behind which is situated a half-inch steam valve.

When we want to vaporize a house one hundred feet long we use two of the above arrangements, each situated about twenty-five feet from the ends of the house, taking the tubs by the handles, so that we can easily carry the whole from one house to another. We put a handful of tobacco stems loosely into each tub, then put about one and one-half pints of your **Tobacco Extract** into each tub, and if the steam is quite dry when it enters the same, add about one pint of water; but if, as it often happens, the steam is circulating to the given point required, it will condense somewhat, forming more or less water. In that case we withhold the water, as the condensation will add all that is necessary. When all is ready we turn on the steam, and in ten to twelve minutes we have the house as full of tobacco vapor as is needed, and generally enough to kill all the green fly in the house. We have been doing this every eight or ten days during the season with excellent results, and have **never yet found the vapor to injure either flower or foliage.**

As soon as one house is full of vapor we unscrew the hose coupling, carry the tub out, replenish as before, and take to the next house, etc., till the whole are gone over. We find it works much more effectually on cloudy, moist days, as the laps between the glass are then sealed with moisture.

The requirements for this mode of killing green fly are—live steam with means of carrying it through all the houses, and an active man to operate it.

We use a small boiler for pumping and other purposes here, and this does the vaporizing also. I have seen several systems of applying it, but so far have found none so simple or effective. Yours very truly,

JOHN N. MAY.

Thousands of persons throughout America have the past thirteen years used

SLUG-SHOT

TO DESTROY

Currant and Cabbage Worms, Potato Bugs, Cucumber Fleas, Rose Lice and Slugs, Lice on Cattle, Fowls, etc.

Trade Mark.

There is scarce a place of size but will be found some merchant who sells SLUG SHOT, and usually in connection with the seed trade. THE GREAT SEED DEALERS are the chief distributors of SLUG SHOT. In all these years no case of harm from its use is known. SLUG SHOT stands to-day the most successful general insecticide in the world for use on VEGETABLES, FRUITS or FLOWERS. It is put up in various sized packages to suit all wants. We prepare all sorts of INSECTICIDES and FUNGICIDES for spraying or in powder.

THRIP JUICE. For Scale, Insects and Caterpillars. Used largely in Florida.
SOLUTION OF COPPER. For Rot, Blight, etc.
GRAPE DUST. Powder for destroying Mildew on Roses and Gooseberries.
SCROFULARIA. Routs Carpet Beetles.

If you have any trouble with Insects or Blights, write and we will try to help you. Send a postal for a pamphlet to

B. HAMMOND, Fishkill-on-Hudson, N. Y.

Sold by the Seed Dealers of America.

J. M. McCULLOUGH'S SONS, CINCINNATI, O.

FLORISTS' SUPPLIES,

METAL WREATHS,

Have just received a large Importation of these elegant goods. Parties wanting same should get our prices.

NEW CAPE FLOWERS Just Received.

WHEAT SHEAVES, GRASSES,

IMMORTELLES, SPHAGNUM MOSS, BASKETS, ETC.

TIN FOIL, DOVES, SAGO PALMS PAINTED.

SEND FOR PRICE LIST.

FLORISTS' FLOWERS.—We pay special attention to seeds used by florists. Our strains of **CINERARIA, PRIMULA and PANSY** are unsurpassed.

Wholesale Cut Flower Department.

ORCHIDS, ROSES, CARNATIONS,

AND ALL OTHER FLOWERS IN SEASON.

FANCY FERNS $1.25 PER THOUSAND.

GREEN SHEET MOSS $1.50 PER BUNDLE.

••• BULBS •••

Do not place your orders until you have our prices.

"Then give us the Order."

LILY OF VALLEY PIPS A SPECIALTY.

HEADQUARTERS

Field, Garden and Flower Seed.

SEND FOR CATALOGUE FREE.

CUT FLOWER PRICE LIST sent to all florists on application.

J. M. McCULLOUGH'S SONS,

134-136 WALNUT STREET, Between 3rd and 4th Streets. **CINCINNATI, OHIO.**

LITTLE'S ANTIPEST.

— A —

Valuable Discovery of the 19th Century.

SILVER MEDAL AWARDED

— BY THE —

CALIFORNIA STATE FAIR OF 1890.

This preparation Is a sure destroyer of the **Scale, Wooly Aphis** and **Insect Pests** of any and all descriptions. It may be as freely used in the conservatory, garden and greenhouse as in the orchard or vineyard. It is non-poisonous and harmless to vegetation when diluted and used according to directions. It mixes instantly with cold water in any proportion. It is **Safe, Sure** and **Cheap.** No fruit grower or florist should be without it.

Send for Circulars and Price List.

R. W. CARMAN, General Agent,
291 AMITY STREET,
FLUSHING, Queens, Co., N. Y.

CATALOGUE PRINTING. ELECTROTYPING.

Done with expert ability for Florists Nurserymen, Seedsmen. Write to

J. Horace McFarland Co.,
HARRISBURG, PA.

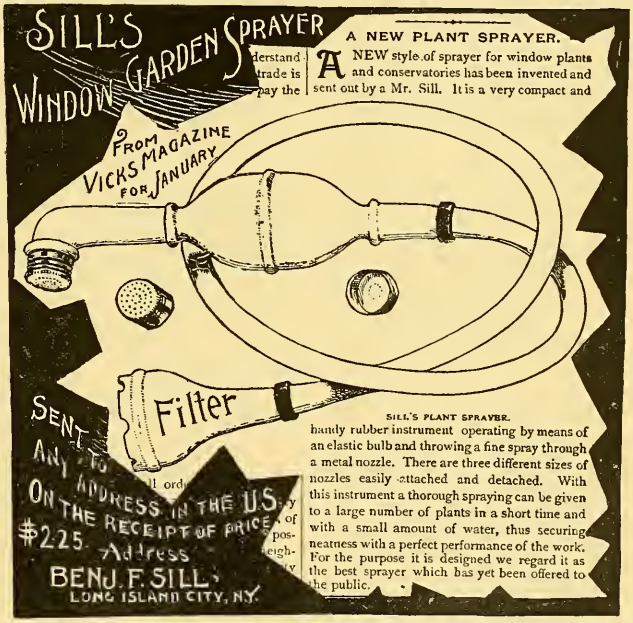
Ice Boxes

FOR FLORISTS.

All sizes and styles. Correspondence solicited.

KANKAKEE MFG. CO., Kankakee, Ill.
CHICAGO OFFICE: 266-268 Wabash Ave.

Please mention the American Florist every time you write any of the advertisers on this page.



A NEW PLANT SPRAYER.

A NEW style of sprayer for window plants and conservatories has been invented and sent out by a Mr. Sill. It is a very compact and handy rubber instrument operating by means of an elastic bulb and throwing a fine spray through a metal nozzle. There are three different sizes of nozzles easily attached and detached. With this instrument a thorough spraying can be given to a large number of plants in a short time and with a small amount of water, thus securing neatness with a perfect performance of the work. For the purpose it is designed we regard it as the best sprayer which has yet been offered to the public.

SILL'S PLANT SPRAYER.

By reason of the filter attached the superfine spray openings in the caps are kept free. Have you any surface sown superfine seeds, or tender seedling plants to care for? If so, you need one of our sprayers. It is especially desirable as a propagating house tool. Sent to any Professional Florist, Seedsman or Nurseryman in the United States on receipt of **$1.50.** Sixteen cents added for postage. Note the following comments:

EXPERIMENT STATION, MAINE STATE COLLEGE, ORANO, ME., Feb. 7th, 1893.

BENJ. F. SILL, Long Island City, N. Y.: *Dear Sir*—Your Sprayer is certainly valuable for use in the Window Garden and for watering delicate Seeds and Plants.

WM. M. MUNSON, Professor of Horticulture.

CASTLEWOOD, ORANGE, N. J., Feb. 21st, 1893.

BENJ. F. SILL, Long Island City, N. Y.: *My Dear Sir*—Your patent Sprayer is a treasure. I would not be without one for ten times its value. Besides being strong and durable it fills a long felt want, distributing the water naturally and as gently as an April shower. Yours truly,

THOS. H. SPAULDING.

Address All Orders to **BENJ. F. SILL, Long Island City, N. Y.**

When writing mention the American Florist.

PANSIES.

In bloom from **best** strains, in prime condition, from cold frames, $25.00 per 1000, $2.75 per 100. Satisfaction guaranteed, f. o. b.

W. J. ENGLE.
Box 211, Dayton, Ohio.

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

Now Watch the Ventilators.

Now is the time when you have to exercise all your gardening wit to keep everything running right. In the long, dark winter months it has been comparatively easy to manage the houses. Keep up the fires was the main point, now keep down the fires is quite as important. A hot, sunny day following a sharp freezing night is trying to your plants and perhaps temper. Those who have steam can by 7 a. m. close off the steam entirely, and in an hour the pipes are cold. Hot water we cannot handle like that. But we can be round early in the morning and stop the fires, and what is of great importance in keeping down the temperature is to put on a crack of air early. Don't wait till ten o'clock, when the houses have run up to 90° or more, and then all at once raise the ventilators a foot or two. Put on a little ventilation early, and increase as the sun rises. This will greatly help to keep the temperature down, and no sudden change will be felt, which is so injurious to most if not all plants. A plant is stunted and miserable when exposed to a sudden change of temperature or draught equally as animals are.

W. S.

The World's Congress Auxiliary.

This promises to be one of the most important events in connection with the great Exposition at Chicago this year. The horticultural division is in charge of a committee consisting of Messrs. J. C. Vaughan, E. G. Hill, J. M. Samuels, John Thorpe, S. M. Emery, W. W. Tracy and Prof. Wm. Trelease. There are co-operative committees from the Society of American Florists and the American Seed Trade Association. Communications regarding the work of the horticultural division should be addressed to J. C. Vaughan, chairman of the committee, P. O. Box 688, Chicago.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

THOS. WEATHEREDS SONS, INCORPORATED -1893
HORTICULTURAL ARCHITECTS AND HOT WATER ENGINEERS.
Office 244 CANAL ST. NEW YORK, N.Y.

NEPONSET • FLOWER • POTS

of Waterproof Paper, light, durable, unbreakable and cheap.

Tomato Growers have used them with success and proved their appreciation by repeated orders.

Cabbage Growers have tried them and duplicated their orders.

Market Growers of Verbenas, Alyssum, Coleus and other plants, which do not shun moisture, have used them extensively in repeated seasons.

Recommended for light and safe packing of tender and valuable plants, for the marketing of Ferns, Dutch Bulbs, Lily of the valley and the like.

Cost about 40 per cent less than earthen pots, and weight considerably lighter, thus saving in first cost and freight.

For Price List and further particulars address

Wholesale Agents:

AUGUST ROLKER & SONS, Station E, New York.
R. & J. FARQUHAR, - - - - Boston, Mass.

Who furnish samples, by mail, postpaid, on receipt of

	10 cts.	11 cts.	14 cts.	17 cts.	22 cts.	40 cts.	60 cts.
For 1 dozen	2¼-in.	2½-in.	3-in.	3½-in.	4-in.	5-in.	6-inch pots.

F. W. BIRD & SONS, Sole Manufacturers, EAST WALPOLE, MASS.

HERE WE ARE

AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

Clear Cypress,

from bottom gutter up is my specialty.

Lyman Felheim,

ERIE, PA.

YOU CAN

SAVE MONEY BY PURCHASING, AND GLASS BY USING

HAMILTON'S PATENT SASH L FTER.

"It works like a charm." So say those who use it. Send us 50 cents for one sample and you will say so too.

B. Y STATE HARDWARE CO.,
272 Freeport Street, BOSTON, MASS.

C. HENNECKE CO.

Milwaukee, Wis.

Price list of our Standard Greenhouse Pots:

1 3-4 inch,	per 1,000,	$3.00	3 1-2 inch,	per 1,000	$6.75
2 inch,	"	3.50	4 inch,	"	8.00
2 1-2 inch,	"	4.00	5 "	"	13.50
3 inch,	"	5.50	6 "	"	22.50

The superiority of our pots is acknowledged by all who have used them.

WRITE FOR OUR CATALOGUE OF

Fancy Pots, Vases, Jardinieres, Wire Designs,

ETC., ETC.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

NATURAL-GAS-MADE GLASS

FOR

ROSE HOUSES, CONSERVATORIES, ETC.

D. H. ROBERTS,

159-161 S. 5th Avenue, NEW YORK.

DEPOT FOR THE FAMOUS

Chambers & McKee Glass Co.'s Glass.

Our Glass Received the Highest Award at the Boston Convention of the S. A. F.

Do You Intend to Build

THIS SEASON?

In these days of Low Prices and Sharp Competition

ECONOMY is the ✳ FIRST CONSIDERATION.

Poor Quality GLASS is no Economy. We can give you Glass which is **Absolutely Perfect** for

Modern Greenhouse Construction.

ROCK BOTTOM PRICES.

Send for Estimate.
Satisfaction Guaranteed.

REED GLASS CO.,

65 Warren Street, and
46, 48 & 50 College Place,
NEW YORK CITY.

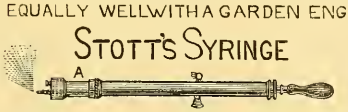
STOTT'S KILLMRIGHT

SYSTEM OF SPRAYING SAVES PLANTS-FLOWERS-FRUITS.

KILLS, INSECTS AND MILDEW

CHARGED WITH KILLMRIGHT, CONNECTED WITH FAUCET READY FOR USE WORKS EQUALLY WELL WITH A GARDEN ENGINE.

END FOR CIRCULAR AND TESTIMONIALS.



CELL "A" CONTAINS THE KILLMRIGHT

STOTT GARDEN IMPLEMENT COMPANY
136 LIBERTY ST. NEW YORK.

J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS •

Greenhouse Material,

LOUISVILLE, KY.

CUTS!

Wood Engraving,
Zinc Etching,
Half-Tone,
Wax Engraving, Photo-Engraving,
Designing.

MANZ & CO.,
183 Monroe Street, CHICAGO. ENGRAVERS.

Buffalo.

There has been a marked improvement in business for the past week both in cut flowers and plants. Every fine day all hands are busy and there are no flowers wasting now. A visit to several of the largest growers within a few days shows me that there is an abundance of good Easter stuff in town. Mr. C. F. Christensen on Delaware avenue has a fine lot of Bermuda lilies, azaleas, spiræa, hyacinths and other seasonable stock, and right on time. James Milley has a fine lot of lilies, callas and cinerarias. Mr. George S. Pickleman has several thousand Bermudas, and most of them will be about right. Mr. Constantine of Hamburg-on-the-Lake has a large lot of fine lilies and other Easter stuff. When Easter comes in the middle or latter part of April there is a big business done on the markets in plants and flowers, but this year the chances are slim that the weather will admit of that, and in that case the stores will have the business.

William Scott returned on Wednesday last from a short trip to Mt. Clemens, Mich., Detroit and Cleveland. Mr. S. seems greatly impressed with the mammoth range of glass of Mr. Breitmeyer at Mt. Clemens, and says Mr. B.'s place is only equalled by the hospitality of himself and sons.

Although perhaps out of place in Buffalo notes, I want to repeat a remark of Mr. Scott's, and that is, "If you want to see a first-class flower store in every respect, go to Euclid avenue, Cleveland, O., and if you want to see a model built rose growing establishment (16 houses), all run to perfection, neat, clean and productive, go out to J. M. Gasser's place on the lake shore, and if you get tired on your ride back to town, jump off at Mr. Hart's, where the sight of his thrifty, well-kept place and his most unassuming welcome will soon dispel any weariness that travel may have produced."

The sudden death of one of our most popular and best known police captains this week called for a very large number of designs. Adams & Nolan received the bulk of the orders.

In my last notes I quite unintentionally omitted to mention that Mr. Dan'l B. Long had to leave our festive table on the night of our annual banquet and catch a train for the east. Before he left he spoke most feelingly of the Florist Club and the great interest he had always taken in the club and the hard work he was willing to do for it in the future. Mr. D. B. L. then tried to make his exit very quickly, but he was halted half way up the room and had to listen to a rousing cheer in his behalf. W. S.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

THE BEST POTS.
THE CHEAPEST.
THE LOWEST FREIGHT RATES.
THE BEST OF PACKING.
THE LARGEST POTTERY IN THE STATE FOR MAKING STANDARD FLOWER POTS.

PRICE LIST OF POTS.

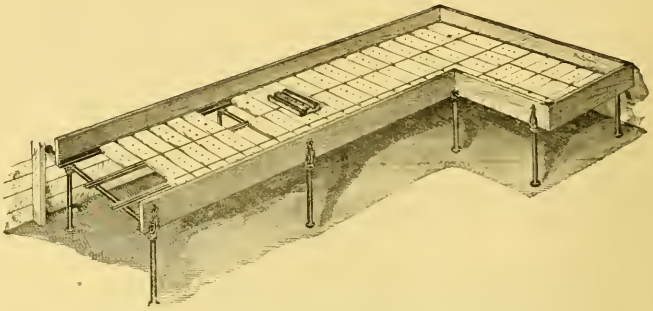
	Per 100		Per 100
2 inch	$ 3.25	6 inch	$ 2.20
2½ "	3.50	7 "	3.50
2½ "	4.00	8 "	5.00
3 "	5.00	9 "	7.50
3½ "	7.25	10 "	10.00
4 "	9.00	11 "	15.00
5 "	13.80	12 "	20.00

Terms: Cash, free on board cars here. Address

HILFINGER BROS., Potters,
FORT EDWARD, N. Y.

Perfect Drainage Bench Tile.

PATENT APPLIED FOR.



THE STANDARD GREENHOUSE BENCH.

AWARDS.

HIGHEST PREMIUMS WHEREVER EXHIBITED.

First Class Certificate of Merit, Convention of the Society of American Florists, Toronto, Canada, 1891.
First Class Certificate of Merit and Special Premium, Madison Square Garden Chrysanthemum Show, New York, N. Y. 1891.
First Class Certificate of Merit, Pennsylvania Horticultural Society Chrysanthemum Show, Philadelphia, Pa. 1891.
First Class Certificate of Merit, Convention of the Society of American Florists Washington, D. C. 1892.

FOR CIRCULARS, ETC., ADDRESS SEND YOUR BUSINESS CARD.

W. P. WIGHT,

UPLAND GREENHOUSES, MADISON, N. J.

"Standard" Flower Pots.

As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address

The Whilldin Pottery Company,

BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.

Every u er of Flower Pots should correspond with us b fore purchasing elsewhere, our facilities are unequalled.

A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.

We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.

SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY,

Manufacturing the

ELVERSON, SHERWOOD & BARKER

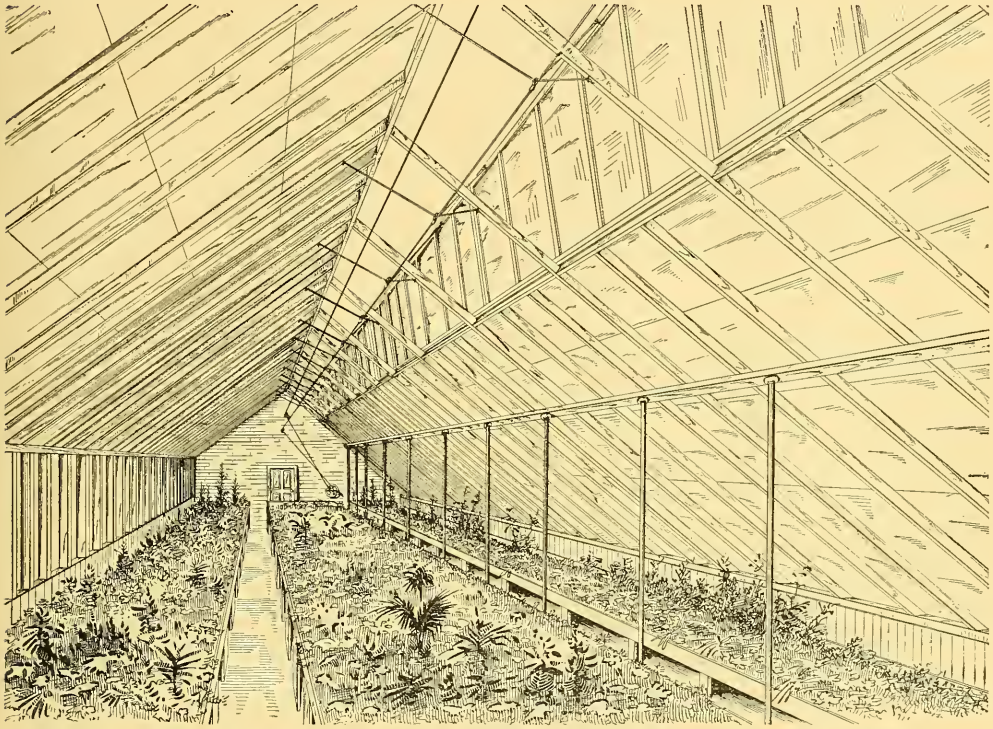
STANDARD FLOWER POTS.

Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bud Pots, etc.

ADDRESS PITTSBURGH CLAY MF'G CO., New Brighton, Pa.

The Champion Automatic Ventilator,

Patented February 21, 1893.



Inside view of three-quarter span house. Showing **"Champion Automatic" Ventilator** operating continuous ventilation. Sash open at top of house. Please notice the neatness of the machine, nothing clumsy or heavy in its parts or connections, no brake shaft or brake weeel in the way, as with other machines. The operating wheel is here shown on inside of house, but if so desired it can be placed in potting or work shed and is entirely out of the way in either place. One does not have to walk to the center of long houses to raise the sash. All will readily see the convenience of this machine in saving much valuable time.

I claim, and can substantiate the claim, that I have in the **"Champion Automatic" Ventilator** by far the best machine on the market. It does away with *all* shafting, raising all sash the same height under all conditions—an important point in its favor. One revolution of the operating wheel is equal to ten revolutions of the worm gear ventilators, and doing this with less labor, and is, therefore, a great saving of time. It can be operated in any position, and in any kind of a house, and will open ventilators in any position that may be required, is cheaper and is so simple that any inexperienced person can place it in position for operation.

When you buy a Ventilating Machine be sure and get the "Champion Automatic," as it is the Best.

For circulars fully explaining the "Champion Automatic" Ventilator, also the new Champion Soil Pulverizer and Sifter, address

E. E. WOLF, P. O. BOX 114, Springfield, O.

Baltimore.

A week of mild, cloudy weather, succeeded by a bright and spring like Saturday, has given a lift to many a coal pile and helped many a florist to look forward to Easter with less apprehension and more confidence. The stock of Easter plants apparent is large and generally good Hydrangeas are scarce, so is smilax, but there seems an ample supply of almost everything else, and, judging from the first lots in the florists' windows and greenhouse of very good quality.

Brackenridge & Co. have rented a large triple store 205 to 209 N. Charles St., as a storehouse and market for their stock of Easter plants, their store on Madison St. being entirely too small for the purpose.

The market men are showing some very fine geraniums and hyacinths on their stalls, and, if the weather continues fine Lexington market will be more like a flower show than a market next week.

MACK.

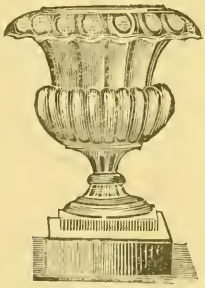
Worcester, Mass.

There has been a steady run of trade since Lent commenced its reign of dullness, but no large decorations or anything out of the usual order of things; with plenty of good flowers in the market prices are averaging about the same as heretofore. The show windows have been very bright with pans of tulips and hyacinths, sturdy little azaleas and golden balls of genista breaking the monotony of the darker foliage of the more graceful palms and ferns.

The weather is mild and spring appears to be near at hand to ease the strains on the fire box and on the poor florist's bank account. In all probability there will be plenty of stuff for Easter; lilies especially will be plentiful, as some of the leading churches have signified their intention of buying direct from Bermuda. Lange has a splendid house of Jacqs coming in.

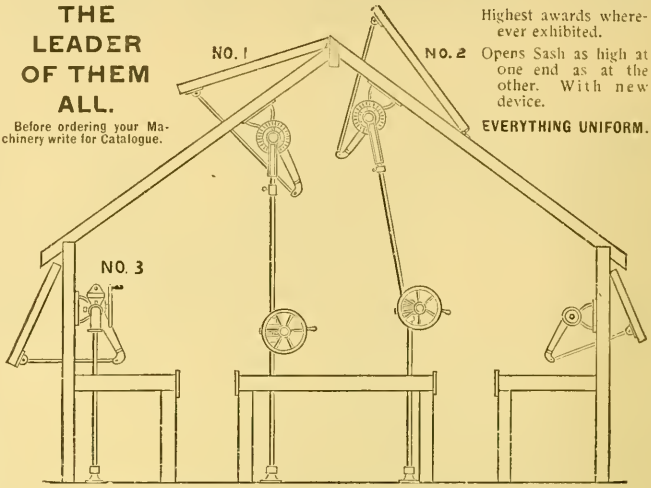
John Roy, a gardener well known in this vicinity, died recently of consumption.

SEEDLING.



IRON
RESERVOIR VASES,
LAWN SETTEES,
AND CHAIRS,
ARE MANUFACTURED BY
McDONALD BROS.,
COLUMBUS, OHIO.
The largest manufacturers of these goods in the world
We issue a large Illustrated Catalogue. Sent free on application.
Mention American Florist.

STANDARD VENTILATING MACHINERY,
THE LEADER OF THEM ALL.
Before ordering your Machinery write for Catalogue.
Highest awards wherever exhibited.
Opens Sash as high at one end as at the other. With new device.
EVERYTHING UNIFORM.



E. HIPPARD, YOUNGSTOWN, OHIO.
Mention American Florist.

Mention American Florist.

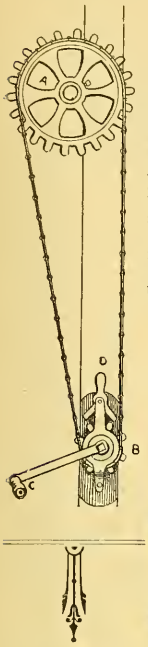
THE "LOCKLAND"
Sash Bars
ARE ALWAYS SATISFACTORY.
This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.
GUTTER MATERIAL, RIDGES, SASH, ETC.
The finest CLEAR CYPRESS used.
Write for circulars and estimates.
LOCKLAND LUMBER CO.
Lockland, O.
Mention American Florist

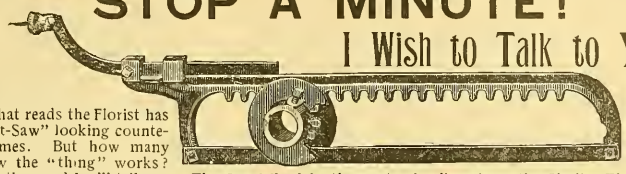
H. M. HOOKER COMPANY,
57 and 59 W. Randolph Street, CHICAGO,
NATURAL GAS MADE GLASS
FOR GREENHOUSES.
Write for latest prices.

GOODYEAR RUBBER CO.
ALL KINDS RUBBER GOODS.
We make a SPECIALTY in GARDEN HOSE, in both Rubber and Cotton.
A GREAT VARIETY OF HOSE REELS, SPRAY PIPES, SPRINKLERS, ETC.
141 Lake Street, CHICAGO.
Mention American Florist.

STOP A MINUTE!

I Wish to Talk to You.





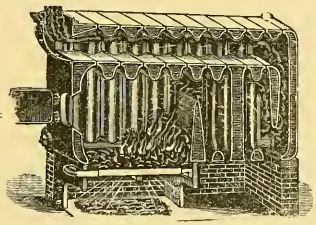
EVERY FLORIST that reads the Florist has seen this "Meat-Saw" looking countenance many times. But how many understand how the "thing" works? Just give me your attention and I will tell you. The Cog Wheel in the center is slipped on the Shaft. The small end of the Cogged Lever is attached to the Rasp, the Cog Wheel is fastened to the shaft by means of the Set Screw. When the shaft is turned the cog wheel turns with it and pushes the cogged lever and sash above forward and back at will of the operator. Can anything be more simple? Because it is simple it is CHEAP.

One crank power placed at the END of a 100-foot green-house will lift every sash to the same height as there is no twist in the shafting.

Single strength one-inch pipe only is used. The Cost of fitting up a hundred feet of green-house is from **$10** to **$25,** according to the number of sash to lift.

SEND FOR DESCRIPTIVE CATALOGUE. **J. D. CARMODY, Evansville, Ind.**

THIS IS THE . . .



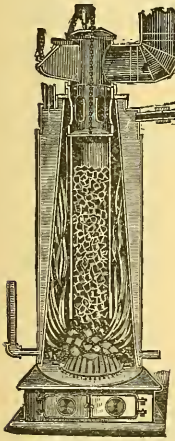
American Champion Water Heater

FOR GREENHOUSE HEATING BY HOT WATER SYSTEM.

It is made by a Florist especially for Florist's use. It can be enlarged at any time more heat is needed, and it burns soft coal without clogging.

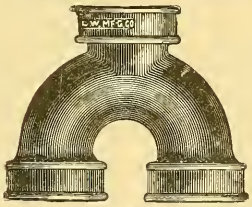
SEND FOR DESCRIPTIVE CATALOGUE.

J. D. CARMODY, EVANSVILLE, IND.



THE WILKS HEATER, FOR HEATING GREENHOUSES, STORES, DWELLINGS, ETC. Manufactured by THE S. WILKS MF'G CO. 123 S. Clinton St., CHICAGO, ILL. SEND FOR CATALOGUE.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

L. WOLFF MFG. CO., 93 to 117 W. Lake Street, CHICAGO.

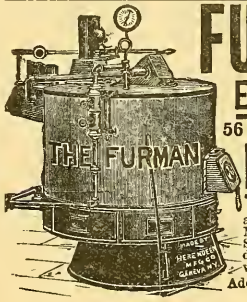
WRITE FOR ILLUSTRATED CIRCULAR.

STANDARD HOSE MENDER.

The only Mender using ordinary galvanized wire No. 14, instead of expensive bands. Any person can handle it with perfect ease. Thousands in use and all testify to its Wonderful Merits

Sample Box, by Mail, 50 cts.

E. HIPPARD, Youngstown, Ohio.



FURMAN BOILERS

Economical — Substantial — Safe.

56 STYLES AND SIZES—BURNS HARD OR SOFT COAL.

Modern Hot-Water Heating

These Boilers have a high reputation for Staunchness, Durability and Safety, and are GREAT COAL SAVERS. Minimum Friction and Maximum Velocity only obtained by VERTICAL WATER CIRCULATION. Send for new 150-page book giving full particulars and a great deal of valuable information on modern Heating and Ventilation, with plans and tables for correct hot-water work. Mailed free. Address HERENDEEN MFG. CO., 26 Vine Street, GENEVA, N. Y.

Mention the American Florist when writing to advertisers on this page.

Index to Advertisers.

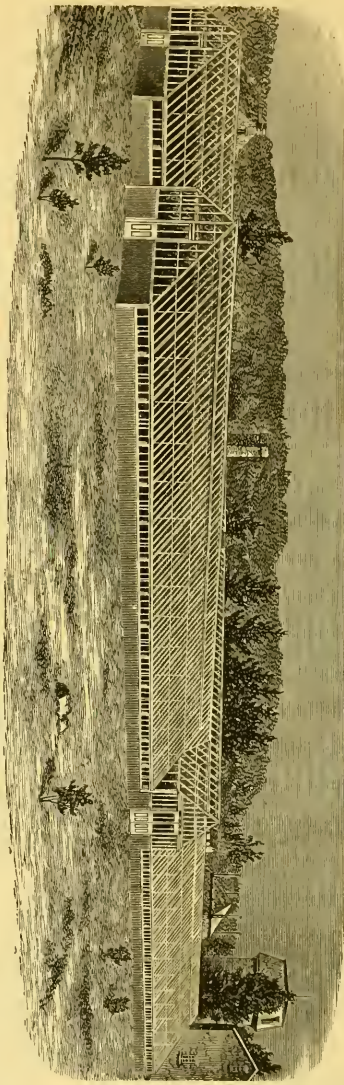
Abel C C & Co.....908
Allan C E.....904
Anchorage Rose Co ..895
Asmus Ernst.....892
Baird Chas A.....894
Baller F A.....902
Barnard W W & Co....896
Bay State Hdw Co.....920
Bayersdorfer H & Co..900
Baylis Henry W.....899
Berger H H & Co.....905
Bird F W & Son.....920
Bonsall Jos E & Son907 913
Boston Letter Co. 896
Brackenridge & Co.....908
Brague L B. 898
Brauer & Richter .. 911
Brinton W P.. 908
Brown R S & Son 912
Brown & Canfield .892 894
Bulst Robert 900
Burkl Fred.....895
Burns & Raynor.....899
Burrow J G.....915
Burton John.. .....896 905
Butz Paul & Son 905
Carman R W.....919
Carmody J D.....925
Chandlee Geo F 917
Chipman Bros 902
Chitty H E.....906
Clark Bros.....902
Cliffe David..... ... 892
Coles W W 893
Cook John.....893
Corbrey T J & Co.....899
Crane S 910
Critchell B P & Co.....913
Crosman Bros 902 903
Denver City Nurseries.902
De Witt Thomas.. 906
Dillon J L.....895 912
Dinger & Conard Co...894
Dorner Fred & Son.....907
Dreer H A..... 911 914
Elsele C & Co.....910
Elgin Rose Co 902
Elliott J Wilkinson .. 908
Elliott W H.....898
Ellis Bros 903
Ellison Wm.....898
Ellwanger & Barry.... 893
Engle W J 919
Essex Heights Floral Co 904
Faust H G & Co 900
Felheim Lyman... 920
Felthoosen J E.....902
Field S B.....904
Frost James 902
Gardiner J & Co.. ... 901
Gibson J C.....898
Goodyear Rubber Co ..924
Hagemann & Titzck ...900
Hall Ass'n.....898
Hammond Benj.....918
Hancock Geo 907
Hansen Christ 911
Hart James.....899
Hart Michael A 923
Hartford H E.....899
Hatch Edw.....902
Heinl Jos.....898
Helte Floral Co 908
Henderson John Co .. 895
Heunecke C Co 920
Herendeen Mfg Co 925
Herr Albert M.....905
Hess Henry.....901
Hews A H & Co.....922
Hillinger Bros.....922
Hill E G & Co. 908
Hippard E.....895 924 925
Hitchings & Co.....920
Hooker H M Co.....924
Horan Edw C. 899
Horan James.... 906
Hostetter E P.....903
Hulsebosch Bros.....905
Hunt E H.....898
Hunt M A.....895 902
Hunter & Purdy 896
Irvine John Co. 905
Jansen Ed 917
Jewett Z K 904
Jooston C H.....892
Jordan Floral Co 894
Kankakee Mfg Co.....919
Kaufmann Ernst & Co.906
Kemble Floral Co 894
Kennicott Bros.....887 889
Koffman E 896 898 902
Krick W C.....896
Kroeschell Bros.....926
Kuehn C A.....898
La Roche & Stahl..894 899
Lockland Lumber Co...924
Lombard R T..... .. 906
Long Dan'l B.....898
Lovett J T Co 894 902
McBeth Thos A & Co..902
McBride Alex.....914
McCarthy N F & Co....899
McCullough's Sons J M.919
McDonald Bros.....924
McFarland J H 905
McFarland J H Co....919
McGowan John. 906
Manz J & Co.....921
Marschutz & Co.....917
May John N.....895 906 915
Meech F J & Son 908
Mendenhall R J.....898
Meyer John C & Co .. 917
Michel Plant & Bulb Co.898
Millang Bros.....899
Moffatt G J.....900
Moninger Jno C.....927
Moon Samuel C.....914
Moon Wm H Co 910
Moore Frank L.....895
Mullen Geo.....898
Nanz & Neuner....893 895
National Fibre Co ... 926
Nielson Hans 898
Niles Centre Floral Co.899
Noneck G 901
Oakwood Rose Garden898
Olson M 899
Ouwerkerk P.....910
Peck & Sutherland.....899
Pennock C J 906
Pennock Sam'l S.....899
Phelps H L 902
Pierson F R Co. 901 911 912 928
Pillsbury J L 902
Pittsburg Clay Mfg Co.922
Powell W S & Co.....915
Prince A & A & Co 898
Randall A L.....899
Raoux C.... .. 901 904 912
Reck John 902
Reed & Keller.....919
Reed Glass Co 921
Renard Joseph.....906
Rimbaud Benj.....901
Roberts D L.....921
Roehrs Theo.....899
Rogers Nurseries.....905
Rolker A & Sons ...906 911
Russell Governor ... 907
Russell S J 917
Salzer Seed Co.....902 907
Sander & Co.....898
Schulz Jacob.....896
Scott Alex.... 902
Scott Robert & Son. ..902
Shelmire W R 906
Sheridan W F.....899
Sherwood Hall Nur Co 903
Siebrecht & Wadley....908
Sill Benj F 919
Siptle Doppfel & Co....922
Situations, wants. .. 902
Smith C A Floral Co...894
Smith Henry 903
Smith Nathan & Son...915
Spaulding T H..910 912 915
Stark Bros ...895 912
Stott Garden Imp Co .921
Strauss C & Co. 895
Struck J N & Bro 921
Sourbeyant E D 912
Styer J J 906
Sunderbruch H L 898
Swayne Edw 906
Swayne Wm.....908
Teas E Y 912
Tilton Bros 898
Tonner John P.....902
Trieker Wm.....914
Ulbricht F J.....903
Vaughan J C.....908
Weathered Sons T W.920
Weeber & Don.....900
Welch Bros 899
Whilldin Pot Co.....922
Wight W P.....922
Wilks S Mfg Co. 925
Wisconsin Flower Ex..898
Wolf E E 925
Wolff L Mfg Co.....925
Wood Bros.....900
Young Bros.....897

HITCHINGS & CO.

ESTABLISHED 1844.

GREENHOUSE HEATING AND VENTILATING,

HORTICULTURAL ARCHITECTURE AND BUILDING.



COMMERCIAL ROSE AND GREENHOUSES, CONSERVATORIES, PALM HOUSES, ETC., CONSTRUCTED WITH POSTS, RAFTERS, PURLINS, GUTTERS, SILLS, COLUMNS AND BRACKETS, ALL OF IRON; AND GLAZING BARS, VENTILATING SASH AND SIDING OF WOOD. ERECTED COMPLETE, OR THE STRUCTURAL IRON WORK SHIPPED READY FOR ERECTION WITH PLANS, DETAILS AND FULL INSTRUCTIONS TO ENABLE LOCAL MECHANICS TO COMPLETE THE SAME. ——) IRON BENCH FRAMES FOR SLATE OR WOOD TOPS. (——

SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUES.

HITCHINGS & CO., 233 Mercer Street, NEW YORK.

Washington.

The Washington Florist club held its annual business meeting March 15, at which there was a full attendance. Election of officers for the ensuing year was the first business and Mr. C. F. Hale was unanimously elected president, but he very modestly declined to serve, owing to pressure of other business. The second ballot resulted in the election of Mr. W. F. Gude, Mr. W. H. King was chosen vice-president; Mr. Adolph Gude, treasurer; the present incumbent, Mr. G. W. Oliver, recording secretary; Mr. John Boyle, corresponding secretary.

If you wish to make sure that your spring trade list will be preserved by those who receive it, print it in the American Florist.

KROESCHELL BROS.

IMPROVED

Greenhouse × Boiler,

41 to 55 Erie St., CHICAGO.

Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around (front, sides and back). Write for information.

PLANT BED CLOTH.

CHEAP SUBSTITUTE FOR GLASS on Hot-beds, Cold Frames, etc. Three grades.

Light, Medium, Heavy.

Used by Florists, Gardeners, etc., invaluable for Tobacco Growers. Protects from frost. Promotes, hardy, vigorous growth and keeps beds warm; will not shrink or mildew. For sale by the leading Dry Goods houses, Seedsmen, Florists, etc. Well known and extensively used. For circulars and samples apply

NATIONAL WATERPROOF FIBRE CO,

50 South Street, - - NEW YORK.

Agents Wanted.

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

THE AMERICAN FLORIST

A WEEKLY JOURNAL FOR THE TRADE

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, APRIL 6, 1893.** **No. 253**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company.
Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,

322 Dearborn Street, CHICAGO.
Eastern Office: 67 Bromfield St., Boston.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis, Mo., August 9 to 12, 1893.

CONTENTS.

Carnations—Seasonable hints 929
—The rust agitation 930
—Chester County Carnation Society 930
Roses—Revolution in rose novelties 930
—Packing roses for market (2 illus) 930
—Rose Gustave Piganeau 931
Natural arrangement of cut flowers 932
Seasonable hints 932
Palm notes 932
Wreath of roses (illus) 933
New York 934
Boston 935
Philadelphia 935
Washington 935
Chicago 936
Baltimore 936
Buffalo 936
St. Louis 937
Providence 937
Toronto 937
News notes 937
A young old florist 938
Wayne spring exhibition 940
Catalogues received 940
The forcing bulb industry 942
Recent legal decisions 944
Auswers to questions 946
To kill moles 946
The New Orleans exhibition 948
Salt as a fertilizer 950

THE PROGRAM for the eighteenth annual meeting of the American Association of Nurserymen to be held at Chicago beginning June 7 next, has been issued and copies may be had on application to the secretary, Mr. Chas. A. Green, Rochester, N. Y. The program gives a list of thirty essays, the order in which same are to be delivered being left for determination by the members on the opening day of the convention. The meetings will be held in a hall within the World's Fair grounds. Secretary Green reports that a railroad rate of one fare for the round trip will probably be obtained.

WE HAVE RECEIVED notice of the death of M. Jean Eugene Chaure, widely known among French horticulturists. He was managing editor of the Moniteur d' Horticole, and an active member in various horticultural societies. M. Chaure was seventy-two years old.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

Seasonable Hints.

Propagation may still be carried forward, but the last lot of cuttings should now be in the sand. These must be watched with the greatest care if a good strike is expected. The great trouble is to keep down the temperature of the house on warm days. Light shading we have used for some time, and a heavier coat should now be applied. Of course all the ventilation possible must be given during the day. This creates drafts on the cuttings that are injurious unless they have struck root, particularly should the wind be high. We cover them closely as much as a protection against these drafts as to shade from the sun. At the same time care must be taken not to overdo the shading, the whitewash on the glass being ample merely as a shade. Altogether we never look for a very large strike late in the season, our own experience not being very favorable to April struck cuttings. Plenty of water on the walks will aid materally in keeping down the temperature. Still unless very warm we try to keep a little bottom heat. It may be warm one day and cold the next, when the fire would be needed. This remark might be extended to cover the houses in bloom. A little fire should be kept going until settled weather, even if the excess must be let out through the ventilators. Cuttings of the early blooming kinds will still make very good plants for flowering next winter. The late bloomers will hardly come on in time for that purpose. The latter, however, grown on and carried over next winter in a cold frame will make capital plants for summer blooming.

Plants that have been potted for some time, and kept in a cool house, should be making a stalky growth and may be topped back when six or eight inches in length. We do not like to top them too soon as we think it weakens the plants. Indeed we have had certain varieties that would not stand topping at all, and some growers question the advisability of the practice. However it has always been our practice to top pretty close, and we shall follow up our directions accordingly. The tops taken off now can be saved and rooted if the kind is a new or valuable one. If the young plants can now be removed to a cold frame, all the better. The sash should be removed most of the time, and only kept on during cold stormy weather. They will thus become hardened off and ready to plant out as soon as the ground can be prepared for them. Do not allow them to become pot bound. It is a good plan when they have pretty well filled the pots with roots to knock them out and set them in trays with some fresh dirt between them. This will give them a new start and also admit of the pots being used a second time.

Preparations should now be made for planting the young stock in the open ground. We do not advise, however, to plant out during April, unless the plants are thoroughly hardened off. A sharp freeze would otherwise destroy a great many plants. It is just as well too to wait until they are well rooted in the pots or flats, not allowing them to become pot bound. Those potted up early of course are the first ready for planting, while the late ones probably will not be ready till June. We know it is customary with many to set out directly from the cutting bench. We cannot advise this practice. We think the plants are too valuable to take any such risks. If the conditions are favorable they may do very well. A dry spell following the planting would certainly destroy a good many of the young plants. Then again a dashing rain may smoothen them out completely. Of course room is a great desideratum in the spring of the year, but it is certainly better to tray or pot the young plants than run the risk o losing half or even all the stock. Room should be provided beforehand by holding a house or bench for the purpose, or by constructing cold frames, which answer admirably. Of course every grower should know what is to his own interest; but to the beginner we say hold your young plants in pots or trays until sufficiently well rooted to set in field.

The question of potting or traying we have settled to our own satisfaction. We do not pretend to say that others would settle the matter in the same way. We always have inclined to the belief that the potted plants did the best. Last season we divided a number of kinds half in flats and half in pots. Invariably those from pots were the best. They made better and larger plants and the loss was far less, not simply when first planted, but throughout the season. The difference in favor of the pots we considered would pay for the pots in one season. The great objection is the first cost of the pots. They are, however, really the cheaper in the end. The trays last but a season or two, but the pots are grown for ten or fifteen years at least. We estimate that the pots in use for ten years would about equal the cost of the trays for the same number of plants for the same time, and you would still have the most of your pots if properly taken care of.

W. R. SHELMIRE.

Avondale, Pa.

The "Rust" Agitation.

ED. AM. FLORIST.—While the value of the very learned treatises on carnation diseases recently published in the FLORIST cannot well be measured, and we all owe their authors a lasting debt of gratitude, they have produced one effect which is causing some embarrassment to growers of rooted cuttings. A good many buyers are so fearful of disease that they see signs of "rust" in every discolored leaf which appears in a shipment, and some of them are not backward in unjustly holding the shipper responsible for sending out diseased stock. We all know that the foliage will often become somewhat discolored in transit, especially if packed a little moist, and yet the stock may be perfectly healthy. There isn't a trace of "rust" in my houses, yet a Jersey customer averred the other day, with much superfluous insult, that some cuttings I sent him "were literally covered with rust," though they were clean when sent, and the plants from which they were taken are in ideal health and vigor. Probably some of the leaves had taken on a yellowish tint.

No doubt the treatises in question cover the ground ably and fully, but they are accompanied with so much technical phraseology that the ordinary unscientific reader fails to understand them, and he leaves their perusal with very vague ideas regarding the diseases described. It has occurred to me, therefore, that the FLORIST would do good work if it would publish a lucid description of the exact manifestations of each of these diseases, divested of all technicalities, and omitting all results of microscopic observations, but describing in detail the peculiarities of each as they appear to the unaided eye. It should be so clear that every grower of carnations would be enabled to detect at a glance the presence of any one of these fell destroyers. For instance, as "rust" is the most dreaded of these diseases, it might be made plain to every understanding just what "rust" looks like, and if buyers of rooted cuttings were informed in plain English that its characteristic is a blister-like swelling on the leaf or stem, accompanied or surrounded by dark brown dots or pin points, and that when this blister bursts, as it easily does with slight pressure, it scatters a fine snuff-like dust which rapidly spreads the infection, and that this is always the appearance of rust-infected foliage, they would have no excuse for attributing mere discoloration to rust.

Many florists are in a state bordering on pain owing to the indefiniteness of their knowledge on this subject, and if they were possessed of exact information, both as to disease and treatment, much apprehension would be removed. Unquestionably, if all who grow carnations will at once adopt a systematic course of treatment, involving a liberal use of fungicides, and give their plants the best possible care from start to finish, we shall hear very little talk of diseases in the future. ALEX. MCBRIDE.

Alplaus, N. Y.

Chester County Carnation Society.

The Chester County Carnation Society met in its usual place. Geo. Love showed a variegated yellow seedling of good form and size, on long stiff stems. Edward Walton exhibited some meritorious seedlings, also a seedling cast off by one of the members, which was grown in fine form; he suggested the value of an extended test before a variety is sent out or thrown out. Edward Swayne showed Buttercup from Mr. Cook of Baltimore, said to have been grown from seed of Buttercup crossed with Buttercup. Members could see no variation from the true type.

Discussion on a floral exchange seemed to favor the idea of beginning in Kennett Square rather than in Philadelphia, and extending to the latter village later.

A letter from the state chemist was read, giving analysis of carnation plants and flowers. It showed the chief constituents to be potash and lime, with considerable phosphoric acid.

A committee was appointed to draft a scale of points to be used in awarding prizes for carnations. S.

FIG. 2. ROSES IMPROPERLY PACKED FOR SHIPMENT.

Revolution in Rose Novelties.

France and Frenchmen are indissolubly connected with roses and rose growing. Previous to 1880 nearly all our new roses originated in France. The lists of novelties on enumeration generally ran from forty to sixty hybrids perpetuals and from six to twelve tea roses, Eugene Verdier generally supplying annually from ten to twelve hybrid perpetuals himself. As long as the English and Americans sent in carte blanche orders for the entire list of new roses the annual supply kept at a maximum height. And what a lot of rubbish was annually foisted on to those growers eager to procure the meritorious novelties as they were temptingly presented on paper.

The situation is somewhat changed now. Instead of hybrid perpetuals being in preponderance teas have taken first place in the introductions from our Gallic friends. Why the change? Simply this: The buyers of novelties refused to purchase forty to sixty new varieties of hybrid perpetuals in order to get one or two good ones; but the desire for new sorts of tea roses that might possibly prove useful for forcing, has led to a demand for all the new teas and hybrid teas. This explains the change. For 1893 we have seven polyanthas, fifty-one teas, six hybrid teas and only ten hybrid perpetuals from French sources. Another reason for a lessened list of hybrid perpetuals from the Continent is the increase in new ones from the British Isles. These have usually been of superior merit and limited in number.

There is apparent in the changed condition of the rose list a desire to cater to the wants of the rose buying public and this is well, but the same procedure is being gone through with in the list of new teas that prevailed with hybrid perpetuals, a lot of rubbish is annually sent out, with here and there a distinct and worthy variety. If our French friends would send out only the really choice new varieties that they originate they would net much more money from the increased sales of the new and desirable sorts they may have to offer, than by their present methods, although the receipts from the sales would not perhaps be so widely distributed. If French rosarians wish to retain their commerce in new roses they should see to it that their products pass before a competent tribunal, who would certify to the buying public that they were not purchasing duplicates of old varieties, and varieties new in name but inferior to existing sorts. The products of a few of the French houses are usually of high quality, much above the average; all honor to these firms. G. U. R.

Packing Roses for the Wholesale Market.

This is one of the most important things connected with the rose business. The grower must first strive to produce flowers of the finest quality, and then, after producing them, find out the best mode of getting them to the consumer in the best condition. I have seen roses at the greenhouses almost perfect, cut ready to be shipped, and have unpacked them the next morning, and were it not for the fact that I had seen them the night before I could not have been convinced that they were the same flowers.

During the past few years several improved shipping boxes have been introduced. One of the best is that manufact

FIG. 1. ROSES PROPERLY PACKED FOR SHIPMENT.

ured by W. P. Wight, of Madison, N. J. His cases are made any size to suit the shipper, and have three or four wicker trays to the case. These trays are made expressly for one layer of roses. In figure one is one of these trays with roses just as they are received, and packed as nearly perfect as possible. Roses always reach the market better when packed one layer in a box or tray. Many growers make the mistake of crowding too many roses in a box to save expressage, not thinking that the prices realized are often one or more dollars per hundred less on the entire shipment, caused by their damaged condition from being crowded into the box.

In packing roses a little judgment should be used as to the varieties which are least easily bruised, and where it is not convenient to have the system of trays such varieties should be packed on the bottom. La France, Brides and Testouts should always be packed on top, and the less easily bruised, such as Bon Silines, Bennetts, Mermets, Cusins, etc., on the bottom. Watteville is also a very delicate rose, and great care should be used in packing it.

Another important feature very often overlooked is to have a sheet or so of tissue or other soft paper next to the roses. Some growers pack their roses in a common soap box, without any paper at all. Others use common stiff brown paper or old newspapers, which in many cases bruise the flowers even before they reach the express office. Figure two shows a box packed just in this style. The quality of these flowers was very good, but they were ruined by being jammed in the box in such poor shape. If packed in trays the prices realized would have more than paid the grower for his trouble, and it would have been a pleasure for his agent to handle them.

Another fact in favor of this tray system is that one layer and generally one variety being packed in a tray, they can be lifted out and put aside without handling the roses to get at the variety you may want in the bottom of the case or box. For instance, if Cusins were wanted and they were in the bottom of a box, underneath Brides, Mermets, La France, or perhaps many other varieties of roses, all of these would have to be moved in order to get at the Cusins. It is well known that too much handling of a rose decreases its value.

Large roses, such as American Beauties, that do not bruise easily, and have stems from four to eight feet long, may be packed in a common light pine box, which has been used successfully by many of the Beauty growers who do not use trays. Yet as much care should be taken with these roses as any other, packing the flowers so that the heads will be two or three inches from the end of the box. Beauties need not be cut with stems more than five feet in length, unless ordered for some special purposes, and boxes should be long enough to hold them nicely without bending the stems. I have seen some specimen flowers of this variety ruined by the stem being turned in the box, where in transit the flowers have sprung to the end of the box and become so bruised that instead of being sold for $1.50, the market price, the agent was glad to dispose of them for 35c. If more of the growers would go to their agent's place of business and see how their flowers arrive there would be much less complaint about bad packing. JOHN YOUNG.

Rose Gustave Piganeau.

ED. AM. FLORIST.—In the Rosarian's Year Book for 1893, just received, the editor, Rev. H. Honywood D'Ombrain, who is also the Hon. Secretary of the National Rose Society of England, writes as follows: "For the present Gustave Piganeau is a favorite, but I question whether it will be long so." And in the *Gardeners' Magazine* for January 28 Mr. Charles J. Grahame, in an article referring to the Rosarian's Year Book, quotes the above comments by the author on the rose in question, and says "his views on the future of Gustave Piganeau are likely to be correct."

My object in referring to the matter now is that it brings to my mind a letter from Mr. Chas. L. Burr of Springfield, Mass., which appeared in the AMERICAN FLORIST for Dec. 22, '92, in which the writer commented upon a previous communication by an English writer on roses, and criticised the author for doing an injustice to the Gustave Piganeau in failing to state that this rose had won the silver medal for the best hybrid perpetual bloom in the nurserymen's class, and suggested that it could not be expected of an English writer to give a French rose any undue praise.

The discussion is still further interesting, as it is said that the Gustave Piganeau is very likely to come quartered, and in fact an article in a recent number of the *Journal of Horticulture* claimed that the prize-winning bloom was a quartered flower. Your English correspondent described the color of the rose as carmine lake with a tendency to turn purple. Mr. Burr, on the other hand, speaks of it as a rich crimson, which is very different from carmine lake.

Whether a rose is of English or French origin matters little to us if it is only good. As the season for out-door blooming roses is approaching, our rose growers will have an opportunity to test this rose and ascertain its value for America, and I trust we shall in due time be informed through the columns of the AMERICAN FLORIST of the results of their observations. S. W.

Natural Arrangement of Cut Flowers.

These are the days that call for loose arrangement of cut flowers. While one may decry the "set forms," so-called, and any stiff or formal arrangement, still there is plenty of opportunity for the exercise of good taste and natural arrangement —*perse*. What is prettier than a loosely woven wreath of roses, either alone or combined with other suitable flowers, as violets, forget-me-not, mignonette, lily of the valley, etc.?

Bend a stiff enough wire to hold itself in the shape desired, and lightly wind with some green, smilax, asparagus or ferns. Use mostly long-stemmed roses, wired so as not to break, and hold the position given them in weaving the wreath. Commence at one end and work downwards from each side, using rose foliage mostly as the most suitable green; tie with wire, cross the stems at the lower part of the wreath, and finish with a bow of ribbon (narrow ribbon is much used now tied in loops—several yards of it.) Or else use a loose bunch of Roman hyacinth, violets or lily of the valley as a finish. Here is a suitable use for ribbon without being too much of an adjunct.

In my judgment this sort of a wreath is preferable to any that can be made on a moss-filled form. I find that the best trade (always critical) takes to this style. It is not heavy, bulky, or coarse, as are too many made in the usual manner; it is also quickly made—that tells in its favor (so much work has to be done, with the florist, on very short notice), but at the same time it calls for a better quality than is ordinarily put into moss forms. Two shades or colors of carnations with asparagus green, worked in this way, also makes a very pretty wreath that is much used with me. By the way, I deem asparagus, whether tenuisimus or plumosus, aside from their own foliage, the most suitable green to use with carnations. I saw another asparagus in the West Indies which I rather liked—A. decurrens. The foliage of Rosa microphylla (small leafage), a half hardy evergreen variety of Cherokee, is a fine thing to work up with loose arrangement in roses. I use it very extensively. It is a rapid growing climber, and is not at all particular as to its location—will grow anywhere! It has long trailing shoots, much branched, with small dark green glossy foliage that holds well cut. Of course the flowers do not amount to much; they are small, white, fruity scented, yet rather pretty to use with their foliage when in season.

Baskets are coming into vogue again, because they admit of loose arrangement, as the flowers can all be used with long stems. A basket without a handle and deep enough to fill in primroses, cyclamen or hyacinths, with lycopodium, acorus, or like greens, makes a very salable article. It is especially useful at Easter, or for decorative purposes, as it can be gotten up before the rush. Probably the pillow is called for more than any other made-up arrangement in cut flowers, and it must be inscribed with all sorts of texts, mottoes, etc. When you have to cover up most of the entire surface with lettering what can be expected of such a piece in the way of graceful arrangement? It is almost, if not quite, out of the question to make it otherwise than stiff and formal. The way I get around it is this: Using a bow of satin ribbon, and on one sash end paint what is wanted—from "Rest" to "Memoria in Eterna," and as much more as called for. It can be attached to the pillow at pleasure; is a "finish" in fact, and does not interfere with loose natural arrangement. I can discount the usual cut and dried made up pillow in this way, and what's more to the point, the trade takes to it. I have very little patience with those who constantly prate against "made-up" flowers as "not in good taste"—and a lot more stuff—as well decry painting as something unnatural and artificial. There are just as many "daubs" among paintings as there are excrescences in floral work; but even this fact does not gainsay true art. "The very art of which is nature."

It is somewhat of a surprise that *The Youth's Companion*, a journal that commands the very best talent, should publish so misleading an article as "Easter Floral Decorations." While it is not *all* bad, I want to quote some of its specialties. The writer recommends buyers at Easter to purchase Dianthus barbatus (Sweet William) D. Chinensis, D. plumarius: "While not so popular as the florist's carnation, they may be had at much less cost." I doubt much whether they could be had *at all*, even in the Boston market.

This party has little faith in "hired decoration"; he says: "Our people have developed too much taste and have too great an interest in plants and flowers to permit 'hired decorators' if you can possibly get along without them."

In my earlier experience I had a church to decorate for Easter under the supervision of a large committee of ladies. In the first place they wanted about twice as much as they were willing to pay for, and besides could not even agree among themselves *how* they wanted it done. What one liked did not suit the other, and the "strong minded" got into a wrangle and tangle, even involving the good rector. One lady suggested I should go to the cemetery and cut some myrtle from her husband's first wife's grave to drape around. I left in disgust. After they had tired themselves out without accomplishing much I came around and with an assistant quickly transformed matters to an orderly, graceful arrangement satisfactory to all concerned. I have had this same church to decorate on special occasions year after year; I can assure you there are no more "committees to supervise decorations."

If a "hired decorator" doesn't honor his business, after having given much thought, study, and careful attention to the subject, what's the use of bothering one's brains about anything? Not so, we should always put our best foot forward; in other words, make the most of our opportunities, showing to the best possible advantages material at hand—therein is art. GROVE P. RAWSON.

Seasonable Hints.

This is the time to propagate poinsettias. The plants left over from Christmas sales should be well ripened by this time. Cut last year's growth off down to two or three eyes of the old wood. Make the cutting with two eyes and put in the sand where you have the strongest heat. They will root in about three weeks. When first potted from the sand be sure and never let them wilt from exposure to bright sun or dryness, or you will lose a large proportion of them. After they are well rooted in the pots give them light and air and by the end of May shift into 4-inch pots. After all danger of the slightest frost plunge them out of doors and water very carefully. It is well to have them in a frame (on a dry bottom); in case of heavy rains you can then protect them. An over soaking of water such as a continuous day's rain would cause would be fatal to them. If they grow quickly and strong, shift them again into 5 or 6-inch pots about the middle of August, or you can leave them till the first week of September and then bring them into the houses and do the shifting then. After October 1st you cannot give them too much light and should at all times have a night temperature of not less than 65°. If grown in a dark house they get to be an ungainly height. You too often see poinsettias with a few scarlet bracts on the end of a leafless stem. They do lose their leaves very easily, and I think from two principal causes; one is too low a temperature, the other is from being starved in the pots. The old plants when cut back can be shaken out and started in 4 or 5-inch pots and otherwise treated as above. If you want some mammoth bracts plant out the young plants at the end of your asparagus or smilax bed in July and you will have heads 20 to 24 inches in diameter. When they are brought into the house look out for greenfly; they are fond of the young bracts and must be frequently fumigated.

You will soon be busy transplanting many seedlings from the seed pans into flats of two or three inches of soil. With few exceptions perhaps none of the young seedlings should be planted deep—that is the seed leaves should be scarcely anything above the surface of the soil, and be sure they are well firmed at the roots. Don't press the soil firmly just at the surface and leave the roots hanging in a little cavity. The object is to get the soil firmly pressed round the young roots; the surface will always become firm enough from watering. This may seem a very simple matter but nevertheless about nine out of ten alleged young florists, in my experience, want to be shown this, and I have lost thousands of young seedlings from this cause by trusting people to do this gardening operation and not watch them. WM. SCOTT.

Buffalo, April 3.

Palm Notes.

While most of the strong growing palms in general use may be repotted at almost any season, providing proper attention is afterward paid to the heating and watering of the house in which they are grown, yet in most establishments a general overhauling takes place during the spring, and the present is a good time for this operation. A thorough cleaning should be given to the plants before repotting, thus disposing of the various insects that may have accumulated during the winter, unless close attention has been given to this particular at all times.

This continual cleaning of plants is one of the most troublesome things the grower of palms has to contend with, but it is well to remember that by looking over the stock frequently, and before the insects secure a firm foothold, much labor and injury may be avoided, for if the brown or black scale insects are allowed to remain on the foliage for a

WREATH OF ROSES ARRANGED BY MR. GROVE P. RAWSON.

few weeks a permanent disfigurement results.

The three or four varieties of brown and black scale are the most difficult to get rid of, for the majority of insecticides have but little effect on these insects unless used in such strong solutions that the young leaves will also suffer, and it therefore becomes necessary to depend on careful sponging for the eradication of these pests, and as intimated above, if this operation is carefully performed at frequent intervals much less injury will be done to the plants than where the latter are permitted to become infested with vermin and then given an annual scrubbing previous to the spring potting or afterward as occasion may arise.

The question of what insecticide to use will naturally arise in the minds of many growers, and while it would be too sweeping an assertion to say that there is no satisfactory preparation of this character to be had, yet it must be conceded that very many of the much-vaunted preparations have proved disappointing, and in the opinion of the writer the most effectual and cheapest insecticide at present is a *weak* kerosene emulsion, the formula for which has several times appeared in the columns of the FLORIST.

In potting the usual trade varieties of palms a good light loam is the foundation for the compost, and if this can not be secured and the loam is of a heavy, clayey character instead it is advisable to add one third of peat to it, or even some good sharp sand will be beneficial. Some short manure is the safest fertilizer, and should be used in the proportion of one to five or six parts of the compost.

It seems hardly necessary to add that the old drainage material in the ball should be removed before repotting, else it will be found to deflect the water in such a way that some of the strong rooted species will suffer from being dry in the bottom while the surface soil ap-

pears to be quite sufficiently moist.

Shading will of course be attended to previous to this date or some scorched leaves will be seen, for until we can secure a grade of glass that is absolutely free from flaws and blisters such accidents will happen. At the same time it should be remembered that too heavy shading is not a wise policy to pursue in palm growing, and especially in the spring and fall, for while the color of the foliage may be very dark and pleasing yet it has not the toughness and dust-resisting qualities that should be found in satisfactory florists' stock and soon fails when used for house decoration.

Among decorating florists there have been heavy losses during the past winter, so many palms having been more or less frozen either while in the wagon or during the short time the plants have been exposed in taking them from the wagon into the house or vice versa. Many of the plants so injured will not pay to keep over with a view to doctoring them up during the summer, for they will occupy valuable space that could be more profitably used in growing on some useful young stock. In some instances, however, there may be some injured plants worth keeping, and these should be repotted as early as possible, putting them in as small pots as the roots will allow, in fact a little root pruning may be indulged in with phœnix, seaforthias, ptychospermas and also arecas, but is not to be recommended for Latania borbonica, it being better to keep the latter in the present pot and to feed a little with liquid manure rather than to prune the roots.

W. H. TAPLIN.

New York.

Easter trade has been something of a surprise in several particulars. To begin with, the plant trade has assumed enormous proportions, and has forced the cut flower trade into the background. It was expected that the plant trade would be very large, and extensive preparations were made by all the big city florists to be in readiness for it, but nevertheless it took them all by surprise. Thorley, Scallen, Warendorff, Brower, Bogart and others ran extra stores for the special accommodation of the plant trade. The picture presented by the great gardens of blooming plants which surrounded these establishments, extending in many cases far out along the sidewalk, was brilliant in the extreme, and as the two great days, Friday and Saturday, were warm and spring-like there was an immense crowd of people out to see and admire the display. The stock consisted mainly of azaleas, genistas, hydrangeas, lilies, lilacs, ericas, marguerites, rhododendrons, tulips, Dutch hyacinths, daffodils and hybrid roses.

The various large establishments on Broadway, Fifth, Sixth and Madison Avenues were well worthy of a visit on Saturday morning. Thorley's big window was a mass of longiflorum lilies with a border of hybrid roses in bud. Inside was to be seen a magnificent bank of plants which occupied the greater portion of the entire store. The central decoration of Small's window was a large ivy cross, encircled by a coronet of cape flowers in which sparkled clusters of tiny electric lights. Fleishmann's store was, as usual, decorated with great taste, and the display of plants here extended full two hundred feet along the sidewalk on Broadway, while across on the opposite side this brilliant show was well balanced by that encircling Scallen's two establishments.

Up town, with more available space, the display was magnificent. The area in front of Alex. McConnell's store on Fifth Ave. was filled with very large and showy plants, the big genistas, eight feet high and four or five feet across, looming up so they could be seen for half a mile. Stumpp's window was gracefully decorated with bougainvillea, Acacia pubescens, cattleyas and violets, and the greenhouse in the rear was stocked full of plants. Hauser's place was brilliant with plants which towered to the ceiling, and Hodgson's large hall was one great exhibition garden. The wide sidewalk in front of Siebrecht & Wadley, and their neighbor Hammond, was half filled with a great mosaic of color, and one walked through a plant-bordered path to reach the doors. Probably the biggest individual plant sale made in the city was that by Mr. Siebrecht of a pair of Acacia armata, each ten feet high and covered with bloom, the price received being $500 for the pair.

Down on Sixth Avenue Bogart, Donahue, Burns, Kuhn and all the rest of the magnates of that district also made a grand show with their plants, and were actually unable throughout Saturday, as were those in other sections, to take care of the business that nearly overwhelmed them. It was simply impossible to handle the crowds of plant customers that thronged everywhere. And when Saturday night came these places looked as though they had been struck by a cyclone. The only places that seemed to fare poorly were the temporary stands occupied by transient or little known tradesmen. People in upper New York do not run after strange gods. An establishment must work up a reputation gradually in order to get any kind of a foothold.

The only plants which seemed to find a slow market were the hydrangeas. While some very fine specimens were shown, yet as a rule the hydrangeas looked as though two weeks more in the greenhouse would improve them greatly. They are not as risky stock, however, as genistas or azaleas, and where they are left unsold they will keep all right for future decorations.

There was a tremendous run on celluloid pots and baskets filled tastily with small assorted plants. The plants most used for this purpose were lilacs, azaleas, cyclamens, daffodils and ericas. These arrangements were beautiful, in many cases equal to the best styles of cut flower baskets. They were tied round with sashes and decorated with bows of ribbon of harmonizing color. Ribbon was extensively used on all kinds of plants to hide bare stems or to add increased brilliancy to the bloom. Hydrangeas sported pale pink or blue bows; yellow sash encircled the pots of daffodils, and the azaleas were decked with rose-colored bows of broad satin. Among the prettiest plants seen were some Thos. Hogg hydrangeas eighteen to twenty-four inches across and each bearing from two to three dozen heads of bloom.

The effect of all this plant trade upon the cut flower business was most unfavorable. There was neither time nor inclination on the part of the retailers to bother much with the cut flowers while this rush was going on. Still the wholesale dealers were not discouraged at once, but looked forward to Saturday night and Sunday morning as the time when they would have their innings. In the meantime the bright sunny weather was opening the blossoms fast, and the great boxes of everything in the cut flower line were being carted into the city mountains high. The quantity of stock sent in from such big establishments as Asmus, Taylor and others was almost incredible and would apparently have supplied the whole country.

At Young's on Saturday it was almost a blockade. There was stock enough from Asmus alone to frighten an ordinary mortal. Wiegand, with his thousand Jacqs, had to wait his turn in the procession. Carnations were gobbled up at sight, but twenty thousand tulips went under the bench to wait for the fellow who didn't know the difference. Moss roses and Brunners from Asmus were beautiful, but it was useless to try and get fancy prices for anything. Burns & Raynor were likewise overwhelmed. Taylor was running in Magnas by the thousand, and Francis' mignonette would have required a whole store to itself. James Hart was angry. The shipping trade had been good on Thursday and Friday, but the perverseness which exists only in a setting hen and certain growers had set in with his consignors, and for his shipping trade he had been loaded with stored stuff, one man alone having saved back eight thousand roses till Friday and was proud of his accomplishment at that. And Mr. Hart was not the only one who complained of this old-fashioned trouble. There were boxes of Beauties here and there blue with age, and Perles that required but a touch to knock them to pieces. But Saturday's cut was fine, and no better lot of roses was ever seen than was offered for Easter, 1893.

Mr. Hart was not enthusiastic. He didn't like Easter. It was "too *hard* work." Horan seemed well pleased. His carnations and violets were his stronghold, and he was "ready for them." Roehrs regarded the situation calmly, and remarked that nothing seemed to be scarce except money. At the 34th St. Market on Saturday the crowd was larger, and what stock there was on sale went at fair figures. The street men were the largest buyers however. These men had the most of the cut flower trade to themselves during Saturday from all appearances. The most of the regular cut flower orders at the stores were put up Saturday night for early delivery on Sunday morning. The great bulk of this trade was for boxes of cut blooms, the proportion of baskets and other design work amounting to almost nothing. The wholesale places kept open all night, with few exceptions, to accommodate the looked-for demand for stock, but the call was very light, and on Sunday there was an abundance of everything left over in the hands of retailers and wholesalers alike.

The prevailing taste for corsage and boutonniere wear ran to violets almost exclusively. Carnations, recently so popular for this purpose, were conspicuous by their absence. Lilies sold out well as a rule. There were quantities of poor callas about, some that had been kept till they were limp as rags, and others that had been picked green two weeks before they should have been touched.

L. Fremin met with a heavy loss on Thursday, March 30. The early ferry boat, on which were two teams carrying about $800 worth of his plants intended for delivery in the city, was run into and sunk and his goods were a total loss. It is believed that he can in time recover their full value.

J. M. Hodgson is seriously ill with pneumonia. Ernst Asmus is laid up with the grippe.

The plant market at Union Square is a success. Canal St. Market is open, but Union Square will eventually supplant it.

It is reported that Fleishmann will soon occupy one of the handsomest stores on Broadway.

Mr. P. Brogan, foreman for the John Henderson Co., who has been connected with that establishment for a quarter of a century or more, has resigned, and it is said contemplates erecting a range of greenhouses at Flushing.

Boston.

The shipping trade for Easter taxed the resources of the wholesale dealers to the utmost. Wednesday and Thursday were the banner days, and thousands of dollars worth of stock was sent north, west and south. The result of the demand created by the wholesale dealers in thus finding a market for everything they could lay their hands upon, bulbous stuff excepted, was to shorten up the supply and advance prices. It was amusing to see the elation of the dealers in the "Exchange" on Friday and Saturday morning resulting from the advanced prices prevailing, which they imagined they got because they chose to, but which was due almost entirely to their little-esteemed friends, the commission men.

As was anticipated lilies ran short and many more could have been sold for Easter. Smilax too was in excessive demand. But carnations which it was expected would run in short supply came in at the last moment in enormous quantities. Bulbous stock of all kinds was overstocked and almost unsalable at any price. Roses were used up clean during the shipping days, but there was a full supply for local needs.

The retail stores were very attractive with their great masses of flowering plants. Lilies were plentiful and good with the exception of that annoying brown tip trouble on the leaves which was very general. Some of the best lilies ever seen here came from John Twombly. Norton, Doyle and others of the large retailers raised their own lilies this year, and in fact most of their plants. This was not encouraging to the regular growers, who threaten in turn to start their own retail market. There were very few genistas to be seen, but azaleas and hydrangeas were plenty and sold well. Becker sent in some very fine rhododendrons.

Among the rarities in cut flowers to be seen in the florists' windows were magnificent Russian violets, English primroses, coreopsis, iris, nasturtiums and large quantities of heather. Norton had some fine plants of red herbaceous pæonies which made a grand show.

Jordan, Marsh & Co., who have made several previous unfortunate ventures in the cut-flower and plant trade tried it again this year with the usual result. They bought the whole contents of a large house of lilies and put the plants on sale, advertising them at cut prices, of course. Not fully understanding the vernacular of the florists, they offered lilies at 23 cents each, meaning the individual blooms. But the public understood it to mean plants regardless of number of blooms. The result was that they were swooped down upon by a hungry crowd numbering thousands, to whom they were finally obliged to yield and away went the plants at 23 cents apiece, the loss to the firm being very large for the plants were well set with buds and flowers. They assert that they have had all the experience in the cut flower trade that they wish.

E. H. Hitchings, one of the best informed men on the wild flowers and ferns of New England, and a member of the cut flower committee of the Mass. Horticultural Society, died on March 28, his eighty-fifth birthday.

Alfred Dimmock, representing Sander & Co., of London, is in town.

E. N. McLaughlin died April 1. He was a member of the Society of American Florists.

Wm Edgar's "smoker" was, like all such occasions, a glorious event. It took place at the greenhouses at Waverly on Thursday afternoon, March 23. The visitors numbered about forty and comprised the cream of the Boston contingent. They found a house of longiflorum lilies containing about three thousand plants in readiness for Easter, bearing a splendid crop of flowers and well worth the trip to see. A house of hybrid roses, a house of giant mignonette and a general collection of Easter plants were also inspected. The objects of the smoker were, first to give an opportunity to see and admire this fine horticultural display, and secondly to discuss an appetizing lunch which was spread in the dining room, a prominent feature of which was an enormous bowl which occupied the center of the table and was filled with a new mixture known as "Pansy Punch" and which was "loaded for b'ar." Pansies are popularly supposed to favor a pensive, thoughtful state of mind, but in this case they appeared to have an opposite influence, the general effect being a development of phenomenal eloquence. The occasion was pronounced to be one of the best on record.

Richard Gallivan, florist, Watertown, has gone into insolvency and offers 25 per cent. payable in 90 days.

The handsomest Mermets and Brides in the city are coming in to N. F. McCarthy & Co. from J. J. Johnson.

Philadelphia.

Easter is over, and a hurry scurry time it was. The growers, the commission men and the dealers had all they could do from Monday morning until Sunday noon.

The weather was perfect, although there were several degrees of frost Tuesday and Wednesday night and a slight sprinkle of rain fell Saturday evening, but not enough to interfere with business.

Easter Sunday was an ideal day and West Walnut street, the fashionable promenade, was crowded with the *elite* of the city. All the Episcopal churches and those of almost every other denomination were decorated more or less elaborately, while the windows of private residences in all parts of the city gave indications of the Easter time by the display of plants and baskets of flowers.

The fine weather was a boon to the street men, and in the markets and on the street corners a large business was done in plants and cut flowers. This did not seem to interfere with the regular dealers, there being plenty of trade for all. There is a market for a great many more flowers than are grown at present if they could be placed before the people with less expense. A low price to most purses means ready consumption, and as the love of flowers seems to be born in nearly every breast it should be possible to satisfy their wishes within their means.

The tendency is toward lower prices. A few years ago lilies were sold for 50 cents a flower, later 35, for the past year or two 25, and this season 20 cents has been reached, although the bulk of them brought 25. Some large retail growers sold for 20, while on the street corners 15 was asked. The wholesale price was 10 to 12 cents a flower and bud; some few extra choice plants brought 15. There were plenty to be had, but we believe all the growers sold out, the demand being so great.

Hydrangeas sold well, although there seemed a few too many. Some very well grown plants were seen, and sold at wholesale at the following prices: 5-inch, 40c; 6-inch, 75c; 8-inch, $1 to $1.25; and 9-inch, $1.50. Anderson, Harris, Bevis and Griffin Bros. furnished most of the hydrangeas. Spirea was plentiful and very fine and sold for from $3 to $4 a dozen.

Becker had some fine Jacqs and Brunners in 7 to 8-inch pots which brought $9 to $12 a dozen. He also had a fine stock of azaleas; these ranged from $1 to $3 each for the most popular sizes.

Stocks in 4 and 5-inch pots brought $10 to $12 a hundred, which would leave very little for the grower, we would think. They are a very useful plant as they can be cut off with profit.

Robert Craig had a great quantity of tulips in 5-inch pots; they were perfect and sold well. There was an immense quantity of tulips on the market, far too many; the price quoted was 4 cents, but many were sold below this price and many more not sold at all. If the growers are to be believed the bulb men will have a hard time getting orders the coming season.

Harris had a choice lot of genistas which sold well; they were as fine as any we have ever seen. Scott & Son had some good La France and Clothilde Soupert; the latter makes an elegant pot plant and would sell better if the buds did not present such a deformed appearance before they open.

All kinds of cut flowers were in full supply and prices were not advanced except for carnations, which moved up to $2 a hundred in price, although the quality has fallen off considerably. There were some good Lamborns, but a trifle soft, while the Hinze's White were very flabby.

Double violets were plenty and a great many were sold, $1 being the price. Valley, hyacinths and paper white brought 3, daffodils 3 to 4, Harrisiis cut 10 to 12, callas 12 to 15.

There were plenty of roses except Jacqs, Edwards, of Bridgeton, and Colflesh having the market to themselves for this rose; they sold for 15. Brides, Mermets and La France brought 6 to 8; Cusins and Watevilles, 6; Perles, Niphetos, Sunsets, 4; Laings, 35 to 40; Beauties, 40 to 50; Brunners, 40 to 60. Burton is now cutting the finest Brunners that have come to town this season; they are remarkable for size and color. K.

Washington.

At the last meeting of the Florists' Club after the election of officers as reported in last issue, Mr. W. F. Gude from the committee on securing new quarters for the club, reported that a number of good rooms could be had, but that the rents were too high, and that the amount in the treasury did not warrant the expenditure of more money for quarters and recommended that the Club remain in its present quarters for another year. Adopted.

Mr. J. H. Ley was selected to read a paper before the club at its next meeting on tropical and sub-tropical decoration

plants. Mr. Philip Gauges was also requested to prepare an essay on the best chrysanthemums for growing on benches for cut flowers, also the best varieties for pot specimens.

C. F. Hale raised the question of the legality of the growing and selling of plants and flowers by government institutions such as the Reform School and Industrial Home School, stating that he had talked to several members of Congress on the subject and they had informed him that government institutions could only dispose of their productions at public auction and the money should then be covered into the general treasury. The main feature of the objections to these institutions was the selling of plants and flowers below market prices; in fact it is said they will sell for any amount rather than take them home again. In this way they interfere with the florists generally. After considerable discussion a committee of six with Mr. Hale as chairman was appointed to confer with the Board of Directors of each of these institutions and see what could be accomplished to abate the grievances.

Mr. Hale was selected as manager of the chrysanthemum exhibition to be held next fall. A committee of three was appointed to revise the premium list for the coming exhibition. Mr. Hale was instructed to make arrangements for the annual banquet. C. LESLIE REYNOLDS.

Chicago.

It is generally considered that the Easter trade was very good, showing a large increase in sales of both plants and cut flowers. In plants the increase was particularly marked; they were not only sold more largely by the regular florists, but there were many peddlers who sold from wagons.

Among the north side florists, E. Wienhoeber & Co., say that their sales were very large, with a decided increase over last year. They sold a good deal of decorating plants and flowers the Thursday before Easter (Holy Thursday), they being used liberally in some of the churches. Easter Day the church decorations were extensive, calling, as usual, for lilies in large quantities. In plants Wienhoeber & Co. displayed admirable material, among them genista and lilac, both of which are very uncommon here. Both were very much admired, and sold rapidly, the lilac coming in for a special share of admiration. Azaleas, daisies and bulb stock were also among the plants; spiræa did not sell well.

Owing to the continued fine weather the flowers were very good in quality, especially roses. But few flowers were sold in baskets or designs, the preference being decidedly for loose flowers.

On the west side H. F. Halle's window full of lilies was a noticeable sight; it was a particularly attractive arrangement, and proved to be an effective advertisement. Mr. Halle says his trade shows a remarkable increase over last year in all classes, but particularly in plants. Azaleas and lilies were the most favored plants with him, colored azaleas selling much better than the white ones. He handled a few hydrangeas, which sold well, but these plants were scarce in the market. Bulb stock went off very poorly, excepting daffodils, which sold very well, either as plants or cut flowers. But there was no demand for tulips and little for hyacinths, or for spiræa, which seems to have had its day.

Among cut flowers choice roses sold well; in fact the standard of quality is improving in Chicago, and buyers now demand good flowers. Prices generally fell below those of last year, but receipts were much larger, showing that a far greater volume of stuff was handled. A noticeable feature was the falling off in the use of made up flowers; formerly a good many set designs have been used in the churches, but this year there were very few.

On the south side the trade showed the same tendency toward plants; in fact they seem to be gradually crowding aside the cut flowers. Mr. Benthey, with J. T. Anthony, reports a very large plant trade, especially in lilies and azaleas, white azaleas being in less favor than the colored. He says that good pot hyacinths sold well, preference being for pale pink, pale lavender, and white; the purple did not take well. Mr. Anthony had some very good rhododendrons, which were a novelty; they were sold out rapidly. Genistas did not go so well; although so showy in decorating it is a disappointment in the house, soon losing its bloom, and people who bought it last year did not seem to care for it this season.

Lilies and violets seemed to distance roses with the south side florists. But where flowers were bought for personal wear small roses, valley and violets led. P. J. Hauswirth found Gontier especially in demand, while there was comparatively little demand for the large roses. Jacqs. sold well, so did LaFrance and Bride, but Beauty seemed quite out of favor. This class of trade was very large, and although prices were lower than last year the returns were much more.

Certainly there was no scarcity of lilies. Callas were very little in demand, the Harrisii being so abundant and cheap. But there were a great many very poor Harrisii on the market, which sold for ridiculously low prices, where they did sell. First-class flowers sold for $10 and $12. There were but few candidums seen; good flowers sold quite readily. A great fault with many of the pot lilies was that they were grown too tall and stalky; the ideal should be a robust plant eighteen to twenty-four inches high, in a 5-inch pot.

Roses came into the market in enormous quantities, and, as usual, a lot were sent in Saturday afternoon, after all the real trade was over. A little business was done on Sunday, but not much, and both Monday and Tuesday were poor days for most of the retailers. There was quite a scarcity of carnations and smilax, but everything else was very plentiful. Lily of the valley is extremely plentiful, generally very good. In spite of the scarcity of smilax asparagus did not go well at all; the people do not seem to understand the value or beauty of this green, and smilax is strongly preferred.

Violets are very plentiful, though in great demand. The amount of stuff coming in in all classes was very much in excess of former years; yet in most cases the demand was even with it. We heard nothing here of Bermuda-grown lilies.

Among the plants hardly a cineraria was to be seen except in the hands of peddlers, and the stores did not seem to care for them. However they were mostly very weedy and poorly grown. Pot daisies were in favor, as they usually are. Most of the dealers expect a very good trade from now on; the indications are that the spring plant trade will be very brisk, and it is expected that the entertainment of strangers during the summer will keep the trade fair for the hot weather. Of course the fakirs are now blossoming out in great quantities, as is usual in spring.

Baltimore.

All seem united in their opinion about the business being first-class during the past week. Fair weather, good plants and flowers and dry streets tempted the most fastidious and delicate of the fair and gentle sex out to make glad the heart of the retail florist by investing their spare change in floral "fixins."

The quality of the plants and flowers offered at the stores and markets was of the finest, and there seemed about twice as much on hand as last year, but it all sold, and the retail man's pockets are as heavy as his heart is light.

Astilbe plumosa made its first appearance in quantity, and judging from the favor with which it was received has come to stay.

The decorations in the churches were more elaborate than usual and consumed enormous quantities of astilbe and lilies. Perhaps the boldest attempt was that at Emmanuel P. E. Church, where, in addition to the usual profuse display of palms, smilax and cut flowers, an immense cross twenty feet high and ten across the arms was built up of shelves twenty-four inches wide, twelve inches apart, and twelve inches deep. Each of these shelves held two plants of astilbe grown in a 12-inch pot and perfect specimens in every way. They were laid on the side in the shelves so that nothing but the top showed from the front, and the result when each shelf was filled was a cross on the altar reaching far up above it apparently formed entirely of astilbe flowers and leaves. The design was the work of Mr. S. M. Shoemaker, whose greenhouse furnished the plants.

All the florists seemed to be loaded up with fine flowers and doing a rushing business all the week. It would be hard to say who among them made the most tasteful window arrangement; they were all very pretty and showed a marked improvement over last year.

The feeling is general that it was the best Easter in years, and it has stirred up a hope that the spring trade may make amends for a long and dreary winter.

The usual grumbling over Dutch bulbs is being heard, and not always from people who fail with them. "I am not going to grow a hyacinth next year" was heard from a certain florist the other day, who will probably clear 50 per cent. on the money invested in bulbs, and get the use of his house for spring bedding stuff besides. The trouble probably is that we count our chickens before they are hatched and, in the fall say to ourselves "One thousand hyacinths sold at twenty-five cents each, that's two hundred and fifty dollars. And they only cost sixty." Then when some rot, and some are defective and some don't sell, and the price for those that do sell is eight or ten instead of twenty-five, there's apt to be grumbling even though the sixty dollars invested yielded as large returns for the time, skill and labor, as any other crop occupying the same space. MACK.

Buffalo.

I have had no time or opportunity as yet to interview but a very few of our florists about Easter trade, but I am sure I can safely say that the volume of business done in flowers and plants was far in excess of any previous year, and the

percentage of gain was much greater than that of any other year. Friday's business was like the business of the Saturdays of other years. There are two reasons for this very gratifying news, one is there is no doubt a great increase in the taste for and love of flowers, and the custom of sending a plant or box of flowers as an Easter gift seems to be the correct thing to do at present with all classes. With us another reason for great increase in Easter trade is, I may humbly say, that we are getting to be a big town.

W. J. Palmer & Son, J. H. Rebstock, C. F. Christensen and Wm. Scott, all found their places of business too small for Easter trade and opened branch stores for the few days' rush.

Further particulars next week. W .S.

St. Louis.

Business for the past week has been very good, Holy Thursday calling for as many flowers almost as Easter day itself. The outside demand has been exceptionally good, and the shipping as a result has been heavy.

The plant trade also has increased with the advancing season, and those doing a southern trade are already in the midst of the great spring rush, the effort from now on being to keep up within a day of the orders. The city trade has commenced, the display at the Union Market being good; among the offerings roses predominated, closely followed by astilbe. Lilies seem to be very scarce here, although most all the stores had them in fair quantity. Hydrangeas were noticeable by their absence, everyone seeming to be behind hand with them. There were some nice cinerarias offered, grown by Wm. Schray, and also mignonette, heliotrope and hyacinths. Among the roses the hybrids seemed to lead, the tea varieties not being "in it" when placed among them. There were some exceedingly well grown Mrs. John Laing which seemed to capture the public with its habit and color.

The store men were all too busy to talk, but from the way they rushed around and the satisfied smile they wore, trade must have been equal to expectations. At C. Young & Sons' there was a fine show of potted lilac as well as a full line of plants. The cut roses were fully up to their usual standard, and among carnations their Daybreaks were particularly noticeable; this variety seems to have come to stay, as all speak of its habit and growth in the highest terms; the only objection that might be urged against it is that the color is not pronounced enough, it being almost too delicate.

Hanft was showing some very fine Wootons, grown by Halstead, of Belleville, as well as some Baroness Rothschild which were particularly well grown. The only thing troubling him seemed to be the non-appearance of the delivery wagon which still had quite a number of trips before it, to judge by the plants set aside and labeled.

Sanders & Benecke were showing some Brides and Beauties of their own growing that would compare favorably with any in the market; they also had a full line of plants.

A meeting of the finance committee was held during the past week at the office of Prof. Trelease at Shaw's Garden. Prof. Trelease was elected permanent chairman, after which various plans were discussed relative to the S. A. F., but nothing definite determined upon, owing to the absence of several members who were too much rushed with Easter work to be able to attend.

Quite a number of visitors have been with us this week, Mr. Brown, of Springfield, Ill., and Mr. Cook, of Pitcher & Manda being here during the first part of the week. They were followed by the genial W. S. Allen, of New York, and last but not least, came Joe Rolker, of Aug. Rolker & Sons, who came in Saturday and found every too busy to talk, and wandered around disconsolate at the fact. R. F. T.

Providence, R. I.

About one hundred persons were present at the annual banquet of the Rhode Island Horticultural Society, among them the Governor and Chief Justice of the State and the acting Mayor of the city in addition to other notable guests. It was the second banquet of the society and the interest developed exemplifies the wisdom of making it an annual event. President J. G. Massie presided and happy addresses were made by President Parker of the Worcester Society, Mr. Manning of Boston, acting mayor Ballow of this city and others.

The Society will hold its spring exhibition April 12, at which it is hoped our florists will make a grand display.

C. W. S.

Toronto.

Two refrigerator car loads of plants left here for the World's Fair on Good Friday and they will probably be unpacked before this appears. Messrs. Ewing and Houston will leave on Easter Sunday. These plants have all been most carefully packed and, barring a smash-up on the way, should arrive in as good order as they left.

All the stores had a magnificent display of plants and cut bloom Saturday before Easter and from all appearances trade seemed to be pretty lively. The weather was exceptionally favorable for handling florists' "stuff." Concerning prices, etc., more anon. E.

News Notes.

NORRISTOWN, PA.—E. Metcalf has added a new greenhouse 80x36, built in best style.

P. A. WILL please take notice that we pay no attention to anonymous communications.

WAUSAU, WIS.—W. R. Sorville is preparing to rebuild his greenhouse, lately destroyed by fire.

WILMINGTON, DEL.—Charles E. Sparks, Jr., has taken out a permit to build five greenhouses in South Wilmington.

GALION, O.—The Easter trade was much larger than ever before. Harrisii, carnations and roses in greatest demand.

BANGOR, ME.—The greenhouses of the Beers Floral Conservatory were destroyed by fire March 23. Loss $10,000, insurance $2,500.

LOUISVILLE, KY.—Nanz & Neuner were visited by burglars the night of March 23. The safe was opened and $85 in money was secured, also a number of valuable papers. No clue was found.

FT. WAYNE, IND.—Businesss during Lent was better than in any previous year at the same season. Miss Flick is adding an office to her greenhouses. B. L. Auger is preparing to build three new houses, one 18x100 and two 16x100 each.

SANTA BARBARA, CAL.—The annual "Flower Festival" will be held April 11 to 14. The program is more elaborate than ever before and the festival of 1893 promises to very considerably exceed the displays of previous years. The floral procession and battle of flowers takes place April 12.

BLOOMINGTON, ILL.—Trade has been better than last year and prices about the same. J. D. Robinson has some very large plants of Acacia pubescens in full bloom and they present a gorgeous appearance. Why is not this plant grown more? There is nothing finer and it is certainly much handsomer and commands better prices than genista.

OTTAWA, ILL.—The La Salle County Horticultural Society has been organized with officers as follows: E. C. Swift, president; I. R. Shafer, Jr., vice-president; D. J. Price, Sr., vice-president; A. W. Orr, secretary; I. W. Raymond, Jr., treasurer. Regular meetings are held on the second and fourth Thursdays of each month, and the annual meeting on the second Thursday of January.

SYRACUSE, N. Y.—Fire did serious damage to the greenhouses of P. R. Quinlan & Co., March 16. The fire started in the engine house over the boiler. Before the flames could be checked that part of the plant was entirely destroyed and the stock in the building that adjoins it was so exposed because the building was partly burned that it will be a total loss. As the heating apparatus is practically destroyed, the entire stock of plants will undoubtedly freeze and the loss is therefore very great.

PEORIA, ILL.—Easter trade was unusually heavy. All the florists fairly outdid themselves. Cole Bros. led off with an immense display of fine Easter lilies; J. C. Murray had a very creditable display of plants; Mrs. Cation's plants and flowers were very fine; J. M. Cole had an immense show of cut flowers and plants. Both flowers and plants brought good prices and all the florists here were in shape to supply a big demand, and they had it, and all will get a good start for the usual rush of spring trade.

SPRINGFIELD, ILL.—Trade fair only, prices for good stock in cut flowers good. L. Unverzagt is building two new greenhouses. H. L. Phelps has been trying mushrooms under the bench in his rose house and reports fair success financially. The crop was good but prices low. Brown & Canfield have been cutting some No. 1 roses and intend growing more Beauties this year. They report Albany as a more profitable rose than La France. Miss Miller, the young lady florist, has one house of roses and one of carnations in exceptionally fine order. Cleanliness is the rule with her and she takes a deep interest in her work, doing all but the firing and carrying in of soil. Her Lizzie McGowan carnations are unusually large and fine. Chas. Hay has been cutting some very fine orchid flowers and his stock looks well.

IN Messrs. August Rolker & Co's., advertisement on page 911 of the rose number the types made them offer improved Bugnot pansy seed at $.50 per ⅛ ounce when it should have been $1.50.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser,

A "Young" Old Florist.

John Spalding of New London, Conn., is one of the few men that retain their perennial youth, and form a connecting link with those old time florists that are fast passing away, men who have been through all the various grades of the profession, long before anyone thought of making a specialty of either roses, carnations, orchids, or chrysanthemums. Although about eighty years of age, he can read and write without glasses and is as enthusiastic as any of the young men to-day, taking as much interest in any new introduction that is likely to prove of value, either as a cut flower, or for decorative purposes.

On a recent visit I found him preparing for a run on aquatics. He has built a tank inside one of his greenhouses, and as soon as the weather will permit, intends making quite a display of this class of plants outside.

He owns quite a large establishment, and personally superintends the whole of it. There are several large greenhouses filled with palms, and other ornamental plants. These are used both for summer and winter decoration. He still grows a house of camellias, which he says will become fashionable again some day, several houses filled with roses, and more of carnations, also a great quantity of chrysanthemums, and invites the public to his exhibition of them every autumn.

Besides a general run of bedding, and other plants for the spring trade, he also keeps a lot of old time favorites, not often seen growing in a modern florist's place, such as a collection of succulent plants, Tillandsias, cacti, and some orchids that I had not seen for years. He is a clever botanist, and knows native plants, as well as exotics, is in correspondence with some of the best authorities all over the country, and in his immediate neighborhood is the acknowledged headquarters for the correct nomenclature of all kinds of plants. SAMUEL HENSHAW.

WHEN writing our advertisers please use one of your printed business letter heads or enclose your business card.

THE AMERICAN FLORIST and *Gardening* together to one address for $1.75. Send orders to the American Florist Co.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—By a German gardener and florist: 15 years experience; commercial place desired. MAX SCHLAU, 1097 N. Halsted St., Chicago.

SITUATION WANTED—As florist by first-class all-round man, Scotchman; single, over 20 years' experience; strictly sober; best of reference. Address FLORIST, 187 Water St., Newburyport, Mass.

SITUATION WANTED—By head gardener, 32 years of age, single, who understands all about florist, nursery as well as landscape gardening. Best of references. C, care of American Florist.

SITUATION WANTED—As head gardener or florist in a private or commercial place, where a man of ability is required. Satisfactory references. Address S. E. J., Tom's River, N. J.

SITUATION WANTED—A German gardener (speaks English), middle aged man, with family, well posted in greenhouse, landscape, and vegetable gardening (20 years' experience) would like a situation on a private place. Address JOHN LOEHRER, 762 18th St., Milwaukee, Wis.

WANTED—A single man competent to grow roses, carnations and general plants. German. State wages. JOHN GIRD, Fremont, Neb.

WANTED—At once, gardener that understands vegetable growing and greenhouse work. Wages half profits. Inquire of Burr Oaks Nursery, Sibley, Ills.

WANTED—A single man who is competent in growing roses, carnations and a general line of florists' flowers for the retail trade. Address I M. care American Florist.

WANTED—Greenhouse hand with some experience, permanent place to good man. Address stating age, reference, etc. THE HUNTSMAN FLORAL CO., 37 W. 4th street, Cincinnati, Ohio.

WANTED—A permanent place in some western city by an energetic young man, where there is a chance of advancement. Address FLORIST, care American Florist.

WANTED—A single man who has had some experience in greenhouse work. State wages expected including board. Address JOHN B. GOETZ, 2165 Mackinaw St., Saginaw, W. S. Mich.

WANTED—Two men to grow cut roses, carnations, and general stock. Steady employment to sober and industrious men. State wages and abilities, with references. Box 577, Peoria, Ill.

WANTED—A good all around German florist, must be married and willing to board two of the other men. Address, with copy of references, and wages, GROWER, care of Welch Bros., No. 2 Beacon St., Boston, Mass.

WANTED—Immediately, sober, reliable man to assist in general greenhouse work; a permanent place to the right man. $20.00 a month and board, with prospect of a rise. Address THOS. GORDON, Mt. Clemens, Mich.

WANTED—Palms, roses, carnations, bedding plants, etc. at lowest spot cash prices. Any florist having extra good surplus stock on hand, communicate with Beer's Floral Conservatory, having lost every plant by fire. Bangor, Maine.

WANTED—A reliable, sober, honest, competent man to raise roses and general greenhouse stock. Must be able to make up designs if necessary. No others need apply. State wages and references. Steady work for the right man. Address A. G., Care of Geo. Mullen, 17 Chapman Place, Boston, Mass.

FOR SALE—At low figures, my place of three greenhouses, two lots and dwelling. For particulars call or write at once. W. T. STEPHENSON, Petersburg, Ill.

FOR SALE—Paying florist's business, large selected stock, good patronage, home and abroad, ¾-acre lot, good dwelling, splendidly located; best reasons for selling. Address PROF. BAGLEY, Abilene, Kans.

FOR SALE OR TO LEASE—Cut flower plant containing 30,000 feet of glass in Chicago; in first-class condition, all modern conveniences. Stock in fine condition for the World's Fair year. Address A. T. JACKSON, Bowmanville P. O., Chicago.

ROOTED CUTTINGS.

Marie Louise Violets, per 1,000 ..... $5.00
Lambom, per 100..... 1.00
Hinze's White, per 100..... 1.00

J. J. Lampert, 836 N. King St., **Xenia, O.**

Healthy rooted runners **Marie Louise Violets**, 90c per 100, $5.00 per 1,000.

Phebe H. Baker, Media, Delaware Co., Pa.

FORCING ROSES

Wideawake Florists will prepare now for next winter.

We make a specialty of all the leading sorts and can furnish healthy young stock to be shifted into one size larger pots on arrival at following prices:

$6 per 100 for Am. Beauty, White La France and Duchess of Albany.
$4 per 100 for Sunset, Mme. Hoste, Mme. Pierre Guillot, La France, Perle, Mme. Cusin.
$3 per 100 for Niphetos, Bride, Mermet, Bon Silene, Safrano.

Also all the famous new sorts: Bridesmaid, Mme. Testout, Kaiserin Aug. Victoria, etc. at lowest Market Prices.

Send List to be priced. Address

NANZ & NEUNER,
LOUISVILLE, KY.

ROSES.

TEAS . . . . . $30.00 per 1000
HYBRIDS . . . . . 40.00 per 1000

Healthy plants, in 2-inch pots.
Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.
Trade list on application.

Jacob Schulz,
LOUISVILLE KY.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST. . . . . .
ANCHORAGE ROSE CO., Anchorage, Ky.

ROSES,

CARNATIONS AND VIOLETS,
STRONG PLANTS,
WRITE FOR PRICES.

Kemble Floral Co.,
OSKALOOSA, IOWA.

H. P. ROSES. 2 years, dormant, select assortment, $11.00 per 100.
CLEMATIS. Monster roots, 4 years old, $5.00 per dozen.
Hydrangea Paniculata. Strong, $12.00 per 100.

W. W. BARNARD & CO.,
6 and 8 N. Clark St. CHICAGO.

FARFUGIUM GRANDE.

First-class plants. Price $8.00 per 100; $1.25 per dozen, by mail. Postage prepaid.

TILTON BROTHERS, 222 Grove St., Aurora, Ill.

BRIDESMAID

AND OTHER

FORCING ROSES.

Send for Price List.

M. A. HUNT,

TERRE HAUTE, IND.

CHEAP NAMED DWARF FRENCH CANNAS.

There is a demand for cheap Canna stock, something that can be sold low and that is good. Having large stocks of the more valuable and higher priced novelties in Cannas we offer the following sorts at these exceptionally low rates. Many of the varieties are worth much more than the price we charge for them and are the best of Crozy's French Cannas of the last three or four year's introduction; potted up and in bloom will meet with a ready sale and be found very profitable; will pay you to discard old stocks and substitute these. Antonio Crozy, Antoine Chantin, Admiral Courbet, Childsii, Enfant Du Rhone, Gourv, Isaac Casati, Jules Chretien, Kaiser William II, Louise Chretien, Mme. Antoinette Allamugoy, Mme. Oriol, Prof. David, Petite Jeanne, Princess De Lusignan, Souv. De Jeanne Charreton, Statuaire Falconis.

Price $7.00 per hundred; $60.00 per thousand.

F. R. PIERSON COMPANY, TARRYTOWN-ON-HUDSON, N. Y.

The Grand New Forcing Rose,
"American Belle."
Prices and full particulars on application.
John Burton, Chestnut Hill, Philadelphia

Golden Returns.

200,000 ROSES 200,000

We offer well established, healthy plants in below named and many other sorts:

From 2-inch pots, $ 3.00 per 100; $30.00 per 1000
From 3-inch pots, 6.00 " 60.00 "
From 4-inch pots, 12.00 " 120.00 "
Not in excess of any one variety.

50,000 Hybrid Perpetual Roses 50,000
at $4 per 100; $40 per 1000, in 50 select varieties.

New and Rare Varieties at Special Rates given in our Wholesale List, now ready.

WE NAME A FEW SORTS ONLY:
Aurora, Bosanquet, Comt. de Labarthe, Bon Silene, Cels, Devoniensis, C. Mermet, Etoile de Lyon, Hermosa, Mme. Cusin, H. M. Stanley, Malmaison, Marie Guillot, Mme. Lambard, Marie Lambert, Marechal Niel, Kruger, Niphetos, Mme. Jos. Schwartz, Safrano, Perle des Jardins, Sombreuil, The Bride, etc., etc.

For anything in the Florist line, or send your lists to be priced. Address

NANZ & NEUNER,
LOUISVILLE, KY.

ROSES

I grow all the leading forcing varieties such as

Mme. Testout, K. A. Victoria
Meteor, Wootton, Beauty, Perle, Bride, Mermet, Watteville, etc.

Let me figure on your order for May, June or July delivery, for first class stock.

MUMS. A good stock in 2-in. pots of all the leading cut flower and commercial varieties at $3.00 per 100; $25.00 per 1,000. Guaranteed true to name.

W. W. COLES, KOKOMO, IND.
Maple Hill Rose Farm.

The New White Rose
KAISERIN AUGUSTA VICTORIA.
From 3-inch pots, $35.00 per 100. 5-inch pots, $5.00 per dozen; $40.00 per 100.

THE NEW VIOLET ROBERT GARRETT,
The healthiest and strongest growing violet up to date; strong, well-rooted runners, $3.00 per 100; transplanted runners, $4.00 per 100. Cash with order. . . . .

JOHN COOK,
318 N. Charles St., BALTIMORE, MD.

Hybrid Perpetual Roses,
Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.
Price Lists to applicants. Address

WILLIAM H. SPOONER,
JAMAICA PLAIN, (Boston), MASS.

FORCING ROSES
All the old, and such new varieties as have been proved, kept in stock.

M. A. HUNT,
TERRE HAUTE, IND.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

SUNNYWOODS GREENHOUSES
THE BIRTHPLACE OF
BRIDESMAID

Its pink color is permanent; it is never deformed; it steadily outsells the Mermet; it is a famous keeper.

IT WILL **PAY** YOU TO

throw away your Mermets and plant Bridesmaids instead.

FROM 2½ INCH POTS:
50 Plants.....$ 7.50
100 Plants..... 10.00

FROM 3½ INCH POTS:
50 Plants.....$10.00
100 Plants..... 15.00

When cash comes with order, I prepay express.

FRANK L. MOORE, Chatham, N. J.

MADAME CAROLINE TESTOUT.
The best rose of its color in existence. It has been fully tested in the New York market and

IT SELLS.

Healthy plants from 2½-inch pots now ready. Per 100, $25 00; per 1000, $200.00; 500 at 1000 rates.

ERNST ASMUS, West Hoboken, N. J.
Mention American Florist.

ROSES FINE HEALTHY PLANTS FROM 2¼-INCH POTS.

Perles, Brides, Mermets, Niphetos, Papa Gontier, Hoste, Watteville, Cusin,
La France, Albany, Wootton, at . $5.00 per 100, $45.00 per 1,000.
Meteor at . . . . . $6.00 per 100, $55.00 per 1,000.
Climbing Perle, at . . . . . $10.00 per 100.

John Henderson Co.,
FLUSHING, N. Y.

ROSES. Clothilde Soupert. ROSES.
$6.00 PER 100.
Grand, healthy plants from 3-inch pots, are in splendid condition for Spring sales. We make this price to move them quickly.
MERMET, NIPHETOS, BRIDE, GONTIER, WATTEVILLE and HOSTE, from 2-inch pots, $4.00 per hundred.
DAVID CLIFFE, Germantown, Phila., Pa.

ROSES.
Finest stock in Northwest
Duchess of Albany, La France, Catherine Mermet, Waban, The Bride, Mme. Hoste, Niphetos, Perle, Sunset, W. F. Bennett.
C. A. SMITH FLORAL CO.,
77 7th Street, South, MINNEAPOLIS, MINN.

Albany, La France
And few other varieties from COLD FRAME—in good shape. 3 and 4-inch pots, $7.00 and $9.00 per 100.
BROWN & CANFIELD, Springfield, Ill.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

Wayne Spring Exhibition.

The spring exhibition of the Wayne (Pa.) Horticultural Society opened March 23 with a very attractive display. The hall was decorated by John Curwin Jr., and the exhibits were admirably arranged by John G. Gardner of Jobstown, N. J. The judges were Messrs. Henry F. Michell, Wm. Warner Harper and John Westcott.

Prizes were given in a number of plant classes, including spring bulbs, geraniums and begonias, the prizes in these classes being pretty well divided amongst John Curwin Jr., Henry G. Standen, and Frank Adelberger. J. G. Gardner made a fine exhibit of amaryllis, and also displayed choice forced vegetables. A large and beautiful display of decorative plants was made by J. M. Hughes, gardener to G. W. Childs, Bryn Mawr. John Burton showed a vase of American Belle. The entire display was highly creditable to the society, and attracted many visitors.

Catalogues Received.

Wm. Tricker, Dongan Hills, N. Y., aquatic plants; A. Bowerman, Winnipeg, Man., plants and seeds; John Saul, Washington, D. C., plants; Ludwig & Richter, Allegheny City, Pa., seeds and plants; T. C. Thurlow, West Newbury, Mass., nursery stock; Stark Bros., Louisiana, Mo., nursery stock; Pitcher & Manda, Short Hills, N. J., cypripediums.

IN THE printed proceedings of the California State Floral Society the result of the guessing contest inaugurated by the Sherwood Hall Nursery Co., at the last chrysanthemum show of the society is given. A first prize of $50 and a second prize of $25 was offered to those who accurately estimated the number of petals in a large chrysanthemum bloom on exhibition. From the report it appears there were 3786 ballots cast, and the estimates of the number of petals in the flower ran all the way from one hundred and twenty up to forty thousand. Estimates of above two thousand were numerous and those below six hundred were greatly in the minority. The actual number of petals in the flower was five hundred and twelve.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

WHITE DOVES
FOR FLORISTS.
Largest and finest stock in the United States. Write for prices to
S. J. RUSSELL,
103 Van Winkle St., Jersey City, N. J.

Asparagus Plumosus Nanus.
CUT STRINGS: 6 to 8 feet long, 50 cents each. 10 to 15 feet long, $1.00 each.
In large or small quantities all the year round. The largest stock in the country.
W. H. ELLIOTT, Brighton, Mass.

Cape Flowers, new crop in best white quality at $1.25 the lb.; 10 lb. lots, $10 net.
Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 30-in. upwards, at 45c., 50c., 60c., 75c. and $1.00 each, according to length.
Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.
Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.
Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc.
For prices consult our
Trade Catalogue, mailed free.
August Rölker & Sons,
136 & 138 W. 24th St., P. O. Station E. New York.

THE SMILAX KING!
Who? KOFFMAN,
Where? WALDEN. Orange Co., N. Y.
What? SMILAX
25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.
When? ALL THE YEAR AROUND.
And he pays the Express.

IF YOU NEED ANY
Cape Flowers, Immortelles, Grasses, plain or fancy Baskets, Metal Wreaths, Letters, Doves, or any other thing in the Florists' supply line, mail us your order.
REMEMBER WE ARE THE
Leading Manufacturers of Wheat Sheaves and Baskets, and Importers of Florists' Supplies.
Catalogue on application
ERNEST KAUFMANN & CO.,
113 N. 4th Street. PHILADELPHIA, PA.

MARSCHUETZ & CO.,
FLORISTS' • SUPPLIES
23 & 25 N. 4th St., PHILADELPHIA, PA.
Send for Catalogue.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

FOR SALE.
Who? KOFFMAN.
Where? WALDEN, ORANGE CO., N. Y.
What?
Adiantum Cuneatum Plants,
from 8-in. pots for propagating, $20.00 per hundred plants.
When? FOR IMMEDIATE DELIVERY.
When writing mention the AMERICAN FLORIST

WHOLESALE FLORISTS
La Roche & Stahl
N. E. CORNER
13th & Chestnut Sts.,
PHILADELPHIA.

SAMUEL S. PENNOCK,
Wholesale Florist
REMOVED TO REAR OF 42 S. 16th ST.,
Philadelphia, Pa.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE
FLORIST,
1122 PINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STEET,
St. Louis, Mo.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

H. BAYERSDORFER & CO.,
WHOLESALE
FLORISTS' SUPPLIES ONLY,
56 N. 4th Street,
PHILADELPHIA, PA.
Our new Catalogue is now out, free upon application.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.

	Per 100
Perle, Gontier, Niphetos	$ 1.00
Mermets, La France, Bride, Wooltons	6.00
Meteors	8.00
Jacqs	12.00
Carnations, short	1.00
" long, "	2.00
" " fancy	2.50
Romans, Valley, Narcissus, Tulips	3.00
Violets, Adiantum	1.00
Callas, Harrisii	10.00
Smilax	20.00

In effect till next issue of this paper.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
116 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.: Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange.
45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY & CO.
Wholesale and Commission
FLORISTS,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

A. G. PRINCE & CO.,
Wholesale and Commission
FLORISTS,
45 LAKE STREET,
In Chicago Cut Flower Exchange. CHICAGO.

WHOLESALE FLORISTS,
JOBBERS IN . . .
. . FLORISTS' SUPPLIES,
FLORISTS' VASES.
METS,
BRIDES,
GONTIERS,
CARNATIONS,
ALWAYS ON HAND.
1 Music Hall Place,
BOSTON, MASS.
HORTICULTURAL AUCTIONEERS. . .

Always mention the AMERCAN FLORIST when writing to advertisers.

Wholesale Markets.

Cut Flowers.

NEW YORK, April 4.

Roses, Bon Silene, Gontiers	1.00@ 3.00
" Perles, Niphetos	2.00@ 4.00
" Mermet, Bride, Hoste	2.00@ 6.00
" Cusin, Watteville	2.00@ 6.00
" Bridesmaid	2.00@ 8.00
" La France	4.00@10.00
" Meteor	4.00@10.00
" Jacquemlnot	6.00@12.00
" Beauty	10.00@60.00
" Morrison	15.00@20.00
" Hybrids	10.00@25.00
" Mme. Caroline Testout	10.00@20.00
Carnations	1.50@ 2.00
Valley, hyacinths, tulips, daffodils	2.00@ 3.00
Harrisii	4.00@10.00
Callas	6.00@12.00
Violets	.50@ 1.00
Cattleyas	50.00
Mignonette	2.00@ 6.00
Adiantum	1.00
Lilac (bunch)	1.00

BOSTON, April 4.

Longiflorum	20.00
Harrisii lilies and callas	8.00@12.00
Candidums	8.00
Cyclamen	2.00
Spiræa Japonica, Deutzia	3.00
Lily of the valley	4.00
Tulips	4.00
Daffodils, double	4.00
Poeticus	3.00
Hyacinths and narcissus	4.00
Mignonette	2.00@ 4.00
Myosotis	2.00
Pansies	1.00
Carnations	2.00@ 3.00
Stocks	3.00
Violets	.75@ 1.00
Roses, Niphetos	6.00
" Gontier	8.00
" Perle, Sunset	8.00
" Bride, Mermet	8.00@12.00
" Jacq., Hybrids	15.00@25.00
Smilax	20.00
Adiantum	1.00@ 1.50
" Farleyense	20.00
Asparagus plumosus	50.00@75.00
Heath, per bunch	50 to 75 cents
English primroses, per dozen bunches	$2.00

PHILADELPHIA, April 4.

Roses, Perle, Gontier, Niphetos	4.00
" Mermet, Bride, Albany	6.00
" La France	6.00
" Hoste, Cusin, Watteville	4.00@ 6.00
" Bennett, Wootton, Guillot	6.00
" Meteor	8.00
" Beauties	25.00@40.00
" Brunners	40.00@50.00
Mignonette	1.00@ 2.00
Daffodils	3.00
Tulips	3.00@ 4.00
Valley	3.00@ 4.00
Carnations	1.00@ 2.00
Callas	12.50@15.00
Harrisii	10.00@15.00
Freesia	1.00@ 1.50
Smilax	15.00@20.00
Asparagus	50.00@75.00
Adiantum	1.00@ 1.50

CHICAGO, April 4.

Roses, Perles, Niphetos Gontier	3.00@ 5.00
" Mermet, La France, Albany	4.00@ 5.00
" Brides, Wootton, Bennett	5.00@ 6.00
" Jacqs.	10.00@12.00
" Hybrids	15.00@25.00
Carnations (short)	.50@ 1.00
" (long)	1.00@ 1.50
" (fancy)	2.00@ 2.50
Callas, Harrisii	8.00@10.00
Romans, Valley	2.00@ 4.00
Tulips, Daffodils	2.00@ 4.00
Tulips, extra	4.00@ 5.00
Violets	.75@ 1.00
Smilax	15.00@20.00

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., BOSTON, MASS.

WISCONSIN FLOWER EXCHANGE,
WHOLESALE
Cut Flowers AND Florists' Supplies
131 Mason St., MILWAUKEE, WIS.
Write us for prices on Harrisii and Freesia bulbs.

Please mention the AMERICAN FLORIST every time you write to an advertiser.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST.
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
The finest Roses, Violets and Carnations
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

HENRY W. BAYLIS,
Wholesale Florist
940 BROADWAY,
. . . . NEW YORK.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

The Seed Trade.

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1883. Applications for membership should be addressed to Wm. Meggatt, chairman membership committee, Wethersfield Conn.

The Forcing Bulb Industry.

A feature of the past season has been the marked decline in the bulb flower trade. What the future of this industry is to be must be a matter of deep concern to a large number of our growers, as well as to the bulb dealers and importers, and since the falling off in popularity and pecuniary returns in this particular class of goods has not been confined to any special section or period, but really covers the entire season and extends over the whole country and includes about every sort commonly grown in quantity, an enquiry into the causes and a search for a possible remedy for the present unfortunate predicament would seem to be desirable.

We think that the explanation given by most thoughtful observers would be over production, and the remedy which would be suggested, retrenchment. Of late years foreign concerns engaged in bulb growing, encouraged by the enormous demand in this country for certain varieties, and jealous of the commissions and profits made by American importers and middlemen, have flooded this country with wholesale catalogues and have sent over their representatives in constantly increasing numbers. As a result of this rivalry competition has been keen, and in the natural ambition of each to show an increase every year in the volume of their trade, the country has been fairly scoured by the traveling agents of American and foreign dealers. Everybody in out-of-the-way corners, no matter how small, has been sought out and importuned to buy forcing bulbs. It requires but little skill to flower them, and the shipping trade in cut blooms enjoyed by the extensive growers in large centers has thus received its death blow, the surplus stock of these establishments has been thrown upon the local market, and overstock with ruinous prices for the flowers have been the result, while the best classes of retail customers have become tired of things which they see peddled on every street corner the season through.

It is not surprising, then, that bulb forcers show an inclination to go slow in giving their import orders for next season; and there seems no doubt that should the value of importations this year for forcing purposes show a falling off of 30 or 40 per cent. the effect on the whole market would be beneficial.

The use of bulbs for out-door spring bloom is on the increase and our bulb dealers will no doubt find a good market for stock for this purpose even though cautious buying on the part of bulb forcers should curtail somewhat this special branch of their business. One good result of all this will be that our European friends who have been running at high pressure on the few select kinds recently so much in demand as forcing varieties in America will now turn their attention to the much larger general list of sorts suitable for out-door planting, prices will be reduced, and the "high pressure" varieties will have time and opportunity to recuperate.

K. J. Kuyk,

HILLEGOM, HOLLAND.

DUTCH BULBS

of highest grade. Trade list now ready, and can be had by addressing J. Terkuile, 33 Broadway, New York. I very much dislike paying any more attention to the circulars and advertisements of my late partner, who has seen fit to advertise over the old firm name without my legal consent, but the confusion they may possibly create in the minds of my customers leads me to state that his assertion that he had bought all the bulbs, etc., was entirely false, and that he has no legal right to make use of the old firm name. There had not been one single bulb sold yet of my late firm. I intend buying back the greatest part myself when the sales take place.

Suffice it to add that my present facilities for filling all orders to the entire satisfaction of my customers are now far superior to what they were before the dissolution of the old firm, and I solicit your further favors, feeling assured that I can now give better satisfaction to my customers than ever before. I am now visiting the American trade, as I have done every spring for the last ten years.

LILY OF THE VALLEY PIPS,

LILIUM HARRISII,

French and Dutch Bulbs.

Write for prices and Catalogues to

Good results can only be obtained from good bulbs.

Hagemann & Tilzck,

GROWERS' AGENTS,

Arch & Water Sts.,

PHILADELPHIA.

GOODS ARE SOLD ON LIBERAL TERMS.

We have them and we want your trade.

BENJAMIN RIMBAUD, BULB GROWER,

Quartier du Temple, Toulon, var, France.

Cable address Benrimbaud, Toulon.

The largest cultures in the South of France, of WHITE ROMAN HYACINTHS, Narcissus Paper White grandiflora, N. Double Roman, N. Double Von Sion, true pure yellow, and other Daffodils. Lilium Candidum, the largest bulbs. Freesias, Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A. Double Rosette the earliest, etc. Prices on application.

G. J. MOFFATT,

Manufacturer of

PAPER BAGS AND ENVELOPES

Special attention given to

Seed Bags and Catalogue Envelopes.

NEW HAVEN. CONN.

PANSIES. Strong, healthy plants from cold frames, $2.00 per 100.

G. NOACK, Batavia, N. Y.

Send for Catalogue of

JAPAN BULBS, SEEDS, AND SHRUBS.

ARAUCARIAS,

AUSTRALIAN Palm Seeds,

CALIFORNIA BULBS AND SEEDS to

H. H. BERGER & CO.

ESTABLISHED 1878. SAN FRANCISCO, CAL.

TUBEROSES.

☞ We are headquarters.	Per 100.	Per 1,000
1st size Dwarf Pearl	$1 50	$12 00
2d size "	80	6 50
1st size Tall Pearl	1 20	10 00
Gladioli, extra large, finest sorts	1 25	12 00

H. G. FAUST & CO.,

64 and 66 N. Front St., PHILADELPHIA, PA.

WOODLAWN FARMS, 1,500 ACRES.

Mention American Florist.

NEW BEDDING BEGONIA

THURSTONII.

Strong plants, $1.00 per dozen; $6.00 per hundred.

J. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

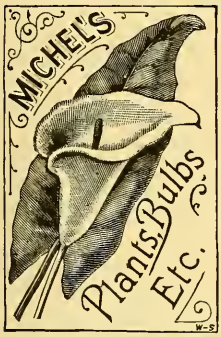
Always mention the American Florist when writing to advertisers.

LARGE CONSIGNMENT JAPAN LILY BULBS.

just arrived in splendid condition; buyers of these should note our exceptionally low prices; stock is fine. Auratum is exceedingly scarce: Lilium Lancifolium Roseum and Rubrum, $8.00 per hundred; Lancifolium Album, $12.00 per hundred; Auratum, 7 to 9 inches in circumference, $8.00 per hundred; extra selected bulbs, 10 to 11 inches in circumference, $12.00 per hundred; Lilium Candidum, $4.00 per hundred.

TRADE LIST ON APPLICATION.

F. R. PIERSON COMPANY, TARRYTOWN ON THE HUDSON, NEW YORK.



Write for wholesale list.

MICHEL PLANT AND BULB CO., ST. LOUIS, MO.

Mention American Florist.

ONE MILLION

FREESIA REFRACTA ALBA.

Extra Size–Selected bulbs–delivery August 1893. Large consumers will save money by getting quotations from the largest growers on the Pacific Coast.

Also Headquarters for CALLA BULBS in all sizes. DWARF CALLA "The Gem," L. AURATUM, home grown and Imported Native Bulbs and Tree Seeds, etc.

SHERWOOD HALL NURSERY CO.,
SAN FRANCISCO, CAL.

COLEUS AND GERANIUMS

Cuttings and potted plants. Wholesale and Retail. . . . .

CHAS. A. BAIRD, Manalapan, Mon. Co., N. J.

IPOMÆA PANDURATA,

(Day Blooming Moon Flower.)

Northern grown, fresh and sound, per 1,000, $20.00, 500 at 1,000 rates; per 100, $2.50, 50 at 100 rates; Barr's Mammoth Asparagus, one year, per 1000, $2.50, Conover's Colossal, 2 years, $3.00 per 1,000.

JAMES FROST,
Greenville, Darke Co., O.

CHRYSANTHEMUMS.

ROOTED CUTTINGS.

Lincoln, Ada Spaulding, Domination, L. Boehmer, Rohallion and 20 other good market sorts, $1.50 per 100; Jessica and Ivory, $2.50 per 100. Ready for delivery January 15th.

Address **J. G. BURROW,**
FISHKILL, N. Y.

GRAPE VINES.

(FOREIGN.)

All the leading varieties for cultivation under glass, in following sizes: Fruiting vines for forcing in pots, 1 year, 2 years, and extra strong. Also Peaches and Nectarines specially prepared for forcing in pots and tubs. Booked orders stored until May 15th if desired. Prices upon application.

JOHN G. GARDNER.
JOBSTOWN, N. J.

Always mention the American Florist when writing to advertisers.

WE SELL SEEDS

TO FLORISTS AND DEALERS.

WEEBER & DON,

SEED MERCHANTS AND GROWERS,

114 Chambers St., New York.

Catalogues on Application.

HULSEBOSCH BROS., BULB AND PLANT GROWERS,

OVERVEEN, near Haarlem, HOLLAND.

Prices on application for the coming season of

ROMAN HYACINTHS,	PAPER WHITE NARCISSUS,
LILY of the VALLEY,	HARRISII LILIES,
LIL. LONGIFLORUM,	TULIPS,
DUTCH HYACINTHS,	CROCUS,
SPIRAEAS,	ROSES, ETC., ETC.

☞ Spring Catalogue now ready. ADDRESS

A. HULSEBOSCH,

P. O. Box 311B. Warehouse 58 West Street, NEW YORK CITY.

Tuberous Begonias.

NOW IS THE TIME TO BUY.

As long as they last we make the following prices: Per 100.

Single mixed	$ 4.50
" " small	3.50
" to color	6.00
Double mixed	10.00
" " small	6.00

All tubers warranted sound and healthy.

F. J. MEECH & SON,
CHARLEVOIX, MICH.

VIOLETS!

Single Blue, best Hamburg forcing, per doz. 50c; per 100 $2.50.

Rosmarinus, strong, out of pots, doz. $1.00.

Chrysanthemums, rooted cuttings, L. Canning, Japanese, white, very fine for commercial or pot plants, per 100 $1.50. Cash with order.

A. OELREICH, QUINCY, ILL.

VIOLET PLANTS.

I will offer for next sixty days

Marie Louise, 75c per 100, $6 per 1,000; **Swanley White,** 50c per 100, $4 per 1,000; **Neapolitan,** 75c per 100, $6 per 1,000; **Schoenbrun** (single), 50c per 100, $4 per 1,000; **Czar** (single), 30c per 100, $2 50 per 1,000; **Zouave** (single), 60c per 100, $5 per 1,000.

All fine healthy plants free from any disease.

Mrs. Eugenia T. Povall, Booneville, Miss

Kills Mildew and Fungus Growth. What does? **GRAPE DUST.** **Sold by Seedsmen.**

Mention American Florist.

TUBEROUS BEGONIAS.

Griffin's unequalled strain. The only Begonias offered that are grown out doors in America. Two first-class certificates at the last meeting of the Society of American Florists. Descriptive list free.

$6.00 per 100, $50.00 per 1,000 for first quality, large tubers, in separate colors.

This quality is better than Imported Tubers at the highest prices.

J. WILKINSON ELLIOTT,
PITTSBURG, PA.

Siebrecht & Wadley,

ROSE HILL NURSERIES,

NEW ROCHELLE, N. Y.

Palms, ORCHIDS, Roses, and New Plants.

FRESH DRACAENA CANES NOW READY.

Mention American Florist

ORCHIDS.

The Finest Stock in the World.

SANDER'S, ST. ALBANS, ENGLAND.

Thirty minutes from London.

Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street. New York City

Cycas Revoluta

The Largest and Best Selected Stock of Cycas Revoluta, sprouts and roots cut off, true long leaved variety, now on hand.

For general Japanese and Australian stock, apply to

F. GONZALES & CO.,
303-312 Wayne St., SAN FRANCISCO, CAL.

☞ Send for catalogue.

FOR SALE.

VIOLETS.

Marie Louise Runners; healthy stock, good plants.

HENRY HESS, Cockeysville, Md.

Recent Legal Decisions.

Amount Recoverable for Discharge Without Notice Where Notice is Required.

Under contracts of employment which provide for a termination thereof by one, or both, of the parties, upon giving certain notice, the measure of damages recoverable for a discharge without notice is the amount of regular wages or salary for the time that notice is required. If that is paid when the person is discharged he has no right of action.

Fisher v. Monroe. Court of Common Pleas of New York City and County. 21 N. Y, Sup 995.

Railroads are Entitled to Special Rates for Special Service.

Where a special service is required of a common carrier, as of a railroad company, such as rapid transit and speedy delivery in case of perishable freight, for instance, a higher rate than for the carriage of ordinary freight is warranted; but if the carrier charges a rate based on such special service and fails to render it, to the damage of the shipper, and without legal excuse, it will constitute a ground of action for damages in the courts.

Decision of the Interstate Commerce Commission, in Loud v. South Carolina R. Co.

Good Will and Firm Name Considered as Partnership Property.

The good will of a partnership is a part of the property of the firm; and where a partnership is dissolved, one of the partners transferring to the others all his interest in the firm business and assets, with the understanding that they are to succeed to the business of the old firm, such sale carries with it the seller's interest in the good will. Of this good will is the firm name; and, where the contract of sale reserves to the retiring partner no rights with respect to the firm name, he cannot lawfully use it in a business of a like kind, carried on by him in the vicinity subsequent to such dissolution.

Brass & Iron Works Co. v. Payne. Supreme Court of Ohio. 33 N. E. Rep. 88.

Asparagus Roots

	Per 100
COLOSSAL, two years old	$4.00
" one year old	3 00
PALMETTO, two years old	6.00
" one year old	5.00

Orders booked in rotation as received and roots forwarded soon as the weather will permit. Prices are for roots delivered f. o. b. Cash on receipt of the roots.

CROSMAN BROS., Rochester, N. Y.

Mention American Florist.

FOR SALE.

Alternanthera, P. Major, Aurea Nana Rosea, new, pot plants, per 100, **$2.00**; per 1,000, **$18.00.** Well rooted cuttings of same, **50c** per 100, by mail 10c extra; per 1,000, **$4.00**, by express only. Achetia the Pearl, rooted cuttings, per 100, **$1.00**; free by mail. Rooted cuttings of Perennial Phlox the Pearl, per 100, **$2.00**, free by mail; Geranium, Mad. Salleroi, 2-inch pots, **$3.00** per 100; 200 for **$5.00.**

Petunias and Pelargoniums all sold.

C. G. NANZ,

OWENSBORO, KY.

The Snow Crest Daisy fills the bill;
Test it any way you will;
However you must grow it cold;
Then its mammoth size will hold.

Every florist should invest
In this Daisy; 'tis the best;
For design work so complete
There's really nothing quite so neat.

CUT BLOOMS, $1 PER 100, POST FREE.

Large stock fine plants all in bud and blooming, 15 for $1.00; 100 for $5.00; sample plant and bloom for 12c. Double fringed petunias, Dreer's, mixed, all colors, stock plants, 3-inch, strong, 60c. per doz.; $4 per 100; smaller from flats, $2.50 per 100; rooted cuttings, $1.10, post free. The florist double white forcing Petunia, white as the driven snow, fringed and delicately scented, valuable for cutting, design work, etc., stock plants, $1 per doz.; from flats, $3 a 100; rooted cuttings, $1.50 per 100. Double Golden Marguerites, the genuine dwarf, large flowered, stock plants, 60c. per doz., $4 per 100; smaller from flats, $2 per 100; rooted cuttings, $1.10, post free. Double Dahlia Sunflower (Helianthus multiflorus), rooted pips ready for potting, 50c. per doz., $2.50 per 100. French Cannas, Fairmount Park strain, reds in variety, dry roots ready for potting, 50c. per doz., $3 per 100; large flowered yellow, mixed, plain blotched, striped; these are extra fine showy kinds 60c. per doz. $4 per 100; a few extra fine bronze-leaved kinds, 60c. per doz. Variegated Vincas, field-grown, 3-inch, $5 per 100; small from flats, $2 per 100. Coleus, Fuchsia, Stevia, Alyssum, double and single, Gem, Feverfew and miscellaneous rooted cuttings, $1 per 100, small pits, $2 per 100. Rooted cuttings per 100 and small plants per doz. post free if desired. Safe arrival and satisfaction guaranteed or money refunded.

Address **J. C. GIBSON, Woodbury, N. J.**

PLANTS. FLOWERS.

Mendenhall, the Pioneer Florist of the Northwest, always to the front with the finest, healthiest, cleanest stock of Roses, Carnations, Smilax and all kinds of Bedding plants to be found. Prices low. Send for catalogue. Cut flowers at wholesale and retail. The pure air of Minnesota is good for man, beast and plants, and Minneapolis is the place, and Mendenhall Greenhouses is the name to address for anything good in the florist line.

MENDENHALL GREENHOUSES,

MINNEAPOLIS, MINN.

Mention American Florist.

"CHRYS-COLA"

SINGLE FUCHSIAS.

Have a surplus of these; will offer until sold, extra large rooted cuttings, my selection of varieties, at

75c per 100; $6.50 per 1,000.

CASH WITH ORDER.

Write for prices on

GERANIUMS and CHRYSANTHEMUMS.

S. B. FIELD,

ROSELLE, N. J.

FICUS ELASTICA.

$5.00, $6 00 and $9.00 per dozen.

JOHN BURTON,

Chestnut Hill, Philadelphia, Pa.

	Per 100	Per 1000
CARNATIONS, standard varieties	$1 00	$9 00
NEWER KINDS	$1.50 to 2 00	
COLEUS	75	6 00

Send for prices on Chrysanthemums, Alternanthera, Snow Crest Daisy, etc.

JOHN J. CONNELLY, Bryn Mawr, Pa.

Spring Sales

in bedding stock are sure to be large and profitable this year. **Are you prepared?** If not, we are, to furnish you with

Rooted Coleus,

in all the best varieties, the quality of which is well known. Our stock this year is better than ever, and includes the coming yellow of yellows, *"Sunrise."*

ALEX. McBRIDE,

. . . . ALPLAUS, N. Y.

* Rooted Cuttings. *

COLEUS FOR YOU ALL!

Golden Bedder and Crimson Verschaffelti specialties, $6.00 per 1000. Fuchsias, Storm King, Moles Worth, E. G. Hill, Phenomenal, Jupiter, Black Prince, and others, $1.00 per 100. Ageratums, dwarf, blue and white, 75c per 100. Heliotrope, 4 sorts, $1.00 per 100. Few fine Standard Dwarf, $1.00 per 100, from flats $1.50. Pansies, Hybrid, Butterfly and Trimardeau, seed bed, 40c per 100; transplanted, 60c per hundred.

CASH WITH ORDER.

J. E. FELTHOUSEN,

SCHENECTADY, N. Y.

TUBERS AND YOUNG PLANTS OF TUBEROUS BEGONIAS.

We have some fine tubers left, assorted colors per 100, $6.00, smaller and mixed ones at $4.00 and $3.00, single only. Small plants, double and single ones, ready April 1st until end of May. Sent by mail for $3.00 per 100, for best single or double mixed, or $2.50 for different strains of single mixed. Order early.

BRAUER & RICHTER, McConnellsville O.

Mention American Florist

WE OFFER IN APRIL

	Per 1,000
2,000 Cypripedium Spectabile, strong clumps, 2 to 5 shoots, will bloom in 4 to 6 weeks	$45.00
3,000 Cypripedium Acaule	20.00
10,000 Tiarella Cordifolia, for bedding	12.00
7,000 Nymphaia Reniformis	21.00
6,000 Trillium Grandiflorum	12.00
7,000 Euphorbia Corollata	15.00

W. A. Brotherton & Co., Pochester, Mich.

STRING

Your Smilax and other trailing plants with

GREEN SILKALINE.

Same cord can be used with plants when decorating. For samples and prices, address

JOHN C. MEYER & CO.,

289 Devonshire Street, BOSTON, MASS.

CATALOGUE PRINTING. ELECTROTYPING.

Done with expert ability for Florists Nurserymen, Seedsmen. Write to

J. Horace McFarland Co.,

HARRISBURG, PA.

D. H. ROBERTS,

159 & 161 South 5th Ave., New York.

NATURAL GAS MADE GLASS

for Rose Houses, Conservatories, etc., etc.

Our glass received the highest award at the Boston Convention of the S. A. F.

TUBEROUS ROOTED BEGONIAS.

Best selling stock for Retail Florists. Order now and start into growth for early sales. Sell like hot cakes when in bloom. Try them if you never have. If you have, then you know it. In large quantities; choicest quality.

SINGLE, 5 separate colors, white, yellow, scarlet, pink and crimson.....$6.00 per 100; $50.00 per 1000

DOUBLE, in 5 separate colors.....$16 00 per 100. (Can be mailed for 30 cts. per 100.

F. R. PIERSON COMPANY, TARRYTOWN ON THE HUDSON, NEW YORK.

CARNATIONS ❋ AHEAD.

You want the best in the market! We have them, 16 Novelties of '93, and all the STANDARD VARIETIES! Send for our complete Price List.

GEORGE HANCOCK, Grand Haven, Mich.

Rooted Cuttings.

Carnations Hinze's White, Mrs. Fisher, Silver Spray, Jeannette, Grace Wilder, Fred Creighton, Mayflower, Century, Anna Webb, $1.50 per 100; $10 per 1000.

Orange Blossom, Portia, Hector, Florence, American Flag, $2 per 100; $15 per 1000.

Coleus, leading varieties, including the finest Yellow Coleus in cultivation. A new variety equal to Golden Bedder in color, and as good a grower as C. Verschaffeltii, $1.00 per 100; $8.00 per 1000.

Double Petunias in four finest varieties, $2.00 per 100.

Fuchsias, finest named varieties, $1.50 per 100.

Heliotrope $1.00 per 100.

Ageratum, Dwarf, White and Blue, $1.00 per 100.

500 at 1000 rates. Cash with order. 10 cents per 100 extra when shipped by mail.

JAMES HORAN, Florist,
BRIDGEPORT, CONN.

Mention American Florist.

CARNATIONS

ROOTED CUTTINGS.

Puritan, Aurora, Golden Triumph, Grace Darling, Daybreak, Pearl, White Wings, Lizzie McGowan, Louise Porsch, W. F. Dreer, J. R. Freeman,

and many other varieties; fine, healthy stock, ready January and after.

HYBRID PERPETUAL ROSES

500 Paul Neyron, strong plants....$10.00 per 100.
20 other leading varieties ..... 10.00 per 100.
$90.00 per 1,000.

☞Send for price list.

WOOD BROTHERS,
Fishkill, N. Y.

W. R. SHELMIRE,
Carnation Grower

AVONDALE, CHESTER CO., PA.

Send for price list of Rooted Cuttings.

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

CARNATIONS

ROOTED CUTTINGS.

Send for Price List of all the leading varieties.

WM. SWAYNE,
P. O Box 226. KENNETT SQUARE, Chester Co., Pa.

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

Orders Booked Now for My Specialties

FOR 1893.

New Jersey.—A scarlet Carnation hard to beat.....$12.00 per 100

Old Rose.—Old rose pink Carnation. .....$12.00 per 100

Nellie Bowden.—Pure bright yellow Canna.....$60.00 per 100

READY IN FEBRUARY.

Other varieties of Carnations, both old and new

JOHN McGOWAN,
• • • • • • ORANGE, N. J.

CUTTINGS

Carnations- Lizzie McGowan, Aurora, Grace Darling, Daybreak and Golden Triumph ready now.
Coleus—Twenty-two tip top bedders for 90c per 100, or $7.00 per 1,000.
Geraniums—A fine assortment at $12.50 per 1,000 or $1.50 per 100, for this, the last lot.
Canna—Dwarf French varieties at $4.50 per 100. **Smilax**—Once transplanted, for 75c per 100, or $6.00 per 1,000. Terms cash. Correspondence solicited.

ALBERT M. HERR, Lock Box 496, Lancaster, Pa.

SEE OUR PRICE LIST

in special carnation number of Jan. 19th, or address

EDW. SWAYNE, Carnationist,
. . . Kennett Square, Pa.

Rooted Carnation Cuttings.

WHOLESALE PRICE LIST NOW READY,

Containing a full list of best new and old sorts, including the Prize takers at MADISON SQUARE and PHILADELPHIA.

Address **H. E. CHITTY, Paterson, N. J.**

ADVERTISEMENTS

• • • SOLICITED • • •

For the annual report of the American Carnation Society.

C. J. PENNOCK, Secretary,
KENNETT SQUARE, Chester Co., Pa.

ROOTED CUTTINGS

Of the Best Old and Most Promising new varieties of

CARNATIONS.

Write for a catalogue and send list of wants for an estimate.

J. J. Styer,
CONCORDVILLE, PA.

ROOTED CUTTINGS

GOOD ONES.

Verbenas, 22 varieties.....per 1000, $8.00, per 100,	$	.90
Coleus, 12 varieties.....	"	1.00
Double Alyssum.....	"	.75
Chrysanthemums, 40 varieties .....per doz.		.20
Fuchsias, 10 varieties	"	.20
Heliotrope, 4 varieties.....	"	.20
Cigar Plant	"	.20
Manettia Vine and Mexican Primrose....	"	.25

I. L. PILLSBURY, Macomb, Ill.

E. G. HILL & CO.,
Wholesale Florists,

RICHMOND, INDIANA.

GRACE BATTLES

and over 60 other varieties of

CARNATIONS

offered the Wholesale Trade.

My list embraces the best Standard and New kinds, including some of particular interest to growers of seedlings. Correspondence and personal inspection solicited. **C. J. PENNOCK,**

The Pines. Kennett Square, Chester Co., Pa.

Carnation Cuttings.

Healthy stock, well rooted, ready to ship now.

Hinze's White.....	per 100,	$1.25;	per 1000,	$10.00
Grace Wilder.....	"	1.50;	"	12.50
Portia.....	"	1.50;	"	12.50
Anna Webb.....	"	2.00;	"	15.00
Lizzie McGowan.....	"	2.00;	"	15.00
W. F. Dreer.....	"	2.50;		

THOMAS DeWITT,
(Successor to DeWitt Bros.) BRISTOL, PA.

ROOTED CUTTINGS of CARNATIONS

By the Wholesale.

Ready now. This is the best time for intending buyers to supply themselves. offer them at moderate prices. Send for Price List. Address

JOSEPH RENARD, Unionville, Chester Co., Pa.

25,000 Carnations.

ROOTED CUTTINGS AND PLANTS.

WILDER, PURITAN, McGOWAN, PORTIA, Fisher and others.
ROSES—Leading varieties. Best strains seed for Florists and Market Gardeners.

Price List Free.

C. E. ALLEN, Brattleboro, Vt.

Answers to Questions.

A correspondent writes: "Must smilax have 60° or over to have it do its very best?" Yes, 60° or 65° to make it return the best profit. It will grow and thrive in a temperature of 50° at night but it grows much slower.

Another question: "Is Linum trigynum and flavum the same thing?" No, they are not. L. trigynum is a coming plant for midwinter sales. It is advertised by several of our large firms. Purchase the young plants this spring, plant them out in the open ground this summer and lift in the fall and you will have very salable plants covered with beautiful yellow flowers.

Another query is: "How can I increase Asparagus plumosus?" They divide readily. 3-inch pots are rather small to begin to divide unless they are well filled with roots.

The same enquirer says: "How is Aristolochia ornithocephala propagated—from cuttings or from seed?" Aristolochia is a large genus. Some species are found in the tropics and some species, like sipho, are hardy. Nicholson in describing the whole genus says: "Cuttings root freely in sand under a bell glass with bottom heat." WILLIAM SCOTT.

Buffalo, N. Y.

To Kill Moles.

I note that some reader of the FLORIST is troubled with moles. My plan to get rid of these pests is to mix a small quantity of arsenic in a little corn meal and after making holes at intervals in the runs drop in small pellets of the meal. This method was completely successful. The moles troubled me no more.

Fremont, Neb. JOHN GIRD.

Cyclamens.

	Doz.	Hundred
Select strains, in 3½-in pots	$1.00	$8.00
H. P. Roses, Select named kinds	1.50	10.00
Dahlias, field grown, proved named	1.25	8.00
Smilax, stocky, well-hardened Seedlings, per thousand,	6.00	.75

F. A. BALLER, BLOOMINGTON, ILL.

FOR SALE.

Extra fine Marie Louise Violet Clumps free from disease, 10 to 20 runners can be taken from each clump. Let me book your order now for them; price only $5.00 cash per 100 for delivery after April 1st. Be quick and speak quick.

E. KOFFMAN, Walden, Orange Co., N. Y.

When writing mention the AMERICAN FLORIST.

DO YOU WANT ANY:

	Per 100.	Per 1000.
Ivies English, one year old	$5 00	$40 00
Alternanthera, red or yellow	3 00	25 00
Echeveria Glauca, 2-2½-inch diam	3 00	25 00
Daisies, hardy red or white	3 00	25 00
Pansies, strong plants, good strain	3 00	25 00
Coleus, rooted Golden bedder and Verschaffeltii	1 00	7 50

Sweet Pea seed, our own growing, finest varieties mixed 65c. per pound. (Cash must accompany all orders.)

JOHN RECK, Bridgeport, Conn.

FOR SALE.
10,000
Rooted Cuttings of Alternanthera

P. major and A. nana, 90c. per 100; $7.00 per 1000. Fine stock.

C. K. HOFFMEYER, Mansfield Valley, Pa.

THE GREAT ANTIPEST.

For particulars, see next week.

R. W. CARMAN, GEN'L AGT.,
291 Amity Street, FLUSHING, Queens Co., N. Y.

Mention the American Florist when writing to advertisers on this page.

The three leading Florist Flowers:
CHRYSANTHEMUMS, CARNATIONS AND ROSES.

ALL THE NEW AND SELECTED STANDARD VARIETIES. . . .

My stock of all are as fine as can be produced at reasonable rates.
Complete list of these will be mailed to all applicants in the trade.

JOHN N. MAY, Summit, N. J.

Mention American Florist.

6 ROZY CANNAS.

WE ARE HEADQUARTERS . . for all the Novelties, and in addition control EXCLUSIVELY several grand varieties which we now offer for the *first time*. We will not be undersold on any of the list.

J. C. VAUGHAN,
New York: CHICAGO.
26 Barclay Street. P. O. Box 688.

Greenhouses: Western Springs. . . .

Association "Flora"

BOSKOOP, HOLLAND.

Now on hand in New York:
CLEMATIS, 3 Years, per 100, $30.00
H. P. ROSES, for forcing, " 9.00
In the best variety, as Alfred Colomb, Anna de Diesbach, B Rothschild, Fisher Holmes, Gen. Jack, La France, Mme. G. Luizet, Mme. Plantier, Magna Charta, Paul Neyron, P. C. de Rohan, Merville de Lyon, Perle des Blanches, Ulrich Brunner and other sorts. Azaleas, Rhododendrons, Spiræas, etc We also have Palms, Dracænas, Araucarias and Bay Trees at our nurseries in Holland. Catalogue on application.

P. OUWERKERK, 206 Cambridge Ave.,
JERSEY CITY, N. J.

MAGNOLIAS

OBOVATA GRACILIS AND PURPUREA.

Fine, bushy plants, 3 to 8 feet, from $25.00 to $200.00 per 100.

Send for descriptive catalogue and wholesale price list free to all in the trade.

SAMUEL C. MOON,
MORRISVILLE, Bucks Co., PA.

—Prices Further Reduced.—

CAPE COD PINK POND LILY.

For price list, Plants and Cut Flowers, address the original cultivators,

CHIPMAN BROS.,
SANDWICH, (Cape Cod), MASS.

VERBENAS, $20.00 per 1,000. 2.50 per 100.

Alternantheras $25.00 per 1,000; $3.00 per 100.
Coleus, Centauria, Alyssum, $2.50 per 100.
Pelargonium, F. Dorner, fine stock, $10.00 per 100.
Roses, fine stock leading forcing varieties.

JOSEPH K. HEINL, Jacksonville, Ill.

When writing to any of the advertisers on this page please mention the American Florist.

CHRYSANTHEMUMS

We Offer for a Short Time the Following Standard Sorts. The Plants are in the Pink of Condition.

					Per 100
W. H. Lincoln,	stock plants,			4-in pots	$15.00
H. E. Widener,	"	"	"	"	25.00
Ivory,	"	"	"	"	25 00
Domination,	"	"	"	"	15.00
Mrs. Geo. Bullock,	"	"	"	"	15.00
L. Canning,	"	"	"	"	15.00
W. H. Lincoln,	"	"	2-in.	"	3.00
H. E. Widener,	"	"	"	"	5.00
Ivory,	"	"	"	"	4.00
Domination,	"	"	"	"	3.00
Mrs. Geo. Bullock,	"	"	"	"	3.00
L. Canning,	"	"	"	"	3 00
Potter Palmer,	"	"	"	"	5.00
Ruth Cleveland,	"	"	"	"	5.00
Mrs. E. D. Adams,	"	"	"	"	6.00
Minnie Wanamaker	"	"	"	"	5.00
Mrs. Irving Clark,	"	"	"	"	3.00
Louis Boehmer,	"	"	"	"	3.00
Mrs. B. Harrison,	"	"	"	"	3.00
Kioto,	"	"	"	"	3.00

Rooted Cuttings ready Feb'y 25th of the following Varieties:

Mrs. Geo. Bullock, L Canning, Kioto, Domination. Mrs. B Harrison, Louis Boehmer, at.....$1.50 per 100
H. E. Widener, Ivory.....$2.50 per 100
25 at 100 rate. Packing free.

JOHN IRVINE CO.,
Bay City, Mich.

P. S. Adiantum Capillus Veneris, 2-inch, a fine lot now ready for shipment at $5 per 100. Nephrolepis Exaltata, 3-inch, $7 per 100.

• • BARGAINS • •

Rooted Cuttings of Coleus, 25 varieties, 80c per 100, $7.00 per thousand; Alternantheras, rooted in August now in flats—P. Major, 60c per 100, A. Nana, 50c per 100; Verbenas, 90c per 100, $8.00 per 1,000; Chrysanthemums, 25 varieties, $1.50 per 100; Moon Vines, strong, $2.00 per 100.

Plants of Coleus and Alternantheras, $2.00 per 100; Verbenas, $2.50 per 100; Moon Vines, $3.50 per 100; the Mosquito Plant reduced to 50c per dozen.

The above stock is first-class in every respect.

Price List on application.

HEITE FLORAL CO.,
712 Linwood Av., KANSAS CITY, MO.

Double White Primrose

produces large quantities of firm white flowers, (valuable for all kinds of cut flower work), every florist should have it; 2-3, 4, 5-in. pots @ $8, $10, $12 and $15 per 100 plants in full bloom.

Large assortment of the best Roses, Carnations Chrysanthemums, M. H. Fern, Coleus, Violets, Geraniums, etc., for florists use. Send for trade price list to

HENRY SMITH,
130 Monroe St. Grand Rapids, Mich.

THE NEW CANNAS

Mme. Crozy,

Star of '91 Etc.

THESE are probably the most profitable novelties that can be handled this season. If you sell pot plants nothing that you can handle will sell so well and pay so good; this ought to make very profitable stock for you to start and pot on; it will sell very rapidly. When in bloom it only requires to be seen to sell and nice plants should be readily retailed at from 50 cents to 75 cents each; nothing that you could handle would afford you as satisfactory a profit. Dormant roots should be secured now, which can be forwarded at very little expense and started into growth and potted. This is the time to start the dormant roots; in starting them do not pot them, but put in damp Sphagnum moss, placing them in some warm spot; the Sphagnum furnishes moisture enough to start them into growth, but it does not hold water enough to cause them to decay. They not only occupy less room but they start better in this way than if potted first. When well started they should then be potted.

MME CROZY and **STAR OF '91** make splendid pot plants and no plant that we know of, unless it be Tuberous Begonias, makes as much display in the greenhouse. It is a plant that can be recommended to your customers with the greatest confidence and as it can be bought very cheaply this season, we think it the most profitable novelty that can be handled by any florist who sells pot plants. These Cannas were offered for the first time last year in any quantity and had an unprecedented large sale, notwithstanding the fact that the price at which they were offered, both wholesale and retail, was almost prohibitory to the average buyer, as they retailed last year at $1.00 each, and could not be bought for less than $60.00 per hundred wholesale, which placed them beyond the reach of the average buyer, but notwithstanding this high price, very large quantities were disposed of, but now that they can be offered at reasonable prices, those who do not secure stock at once and get them in shape for spring sale will miss it, as on account of their high price last year, they were not within the reach of many, and this season in most localities they will be actual novelties as much as if they had never been offered before anywhere. If you have found heretofore that Cannas would not sell, do not think because of that, these would not. The flowers are so large and they bloom in such small pots that they have revolutionized Canna growing. They are not only among the very finest plants for bedding, and will be in great demand by those who desire something choice and rare to vary the monotony of out-door gardening, but they also make elegant plants for the conservatory, both summer and winter; in fact, one of the finest plants for conservatory decoration there is to-day. Every shoot blooms, and as often as a truss of blooms is past its prime, another shoot pushes out beyond it, and each stem blooms three, four, and five times in succession; as the plants throw up numbers of shoots, they are a mass of most gorgeous bloom constantly. We have never offered a plant that has given such unequaled satisfaction, and for which there has been such a demand as there has been for these new Cannas. Heretofore, we preferred to wait before investing in French Cannas until something was produced of intrinsic merit, pronounced enough in character to make it really valuable. Having satisfied ourselves of the value of these novelties beyond all question, we invested in them very heavily, and we have now by far the largest stock of these in the country. Park and cemetery superintendents and florists generally should make large plantings of this stock, which will make a fine display for them, and the increase of the stock will be one of the best investments that can be made for another year.

✳ ✳ ✳ ✳ ✳ ✳

MME. CROZY.—Flowers flaming scarlet, bordered with gold, a marvelous combination of colors, having all the delicacy and beauty of the rarest orchid. As a rule, the more valuable the variety, and the nearer it reaches perfection, the less vigorous it is, but in this case we have one of the strongest and most vigorous growing plants that has been produced in the Canna line so far. This Canna is one that every one can succeed with, as it will grow in the open ground as readily and easily as the common varieties of Cannas, which have been so largely used in sub-tropical gardening. These plants produce all the wealth and richness, and the tropical luxuriance of foliage of the common kinds, added to which is the gorgeousness of their flaming panicles of bloom, which are borne in immense heads at the terminus of every shoot. They produce a very much greater effect than gladiolus, being very much larger. In order to give an idea of the large size of these flowers we have had a painting made, showing the actual size of the flowers and their beautiful coloring; we will be pleased to send this free to any who may not have received it; it is no exaggeration whatever, giving the actual size and the vivid and beautiful coloring of Mme. Crozy. When the large size of the flowers and the large heads of bloom are taken in connection with the freedom with which it blooms, it makes one of the most attractive plants for bedding that it can be possible to conceive of.

STAR OF '91.—More dwarf than Mme. Crozy and valuable on this account. A mass of scarlet when in bloom, but the individual flowers are nothing like as perfect as Mme. Crozy. It is an elegant pot plant and will bloom in the house in the winter splendidly, for which purpose it is admirably suited; as a pot plant for florist's sale, it bids fair to eclipse anything that has been offered for years, as its attractiveness and ease of culture, certainty of doing well, etc., make it a plant a florist can recommend, knowing it will please the buyer every time.

GEOFFREY ST. HILAIRE.—By far the best of the dark-leaved varieties among the new seedling Cannas. Without taking into consideration the flowers of this variety, it would still be by far the best dark-leaved Canna, but when the large size of the flowers is taken into consideration, coupled with the richness of the dark maroon colored leaves with a dark metallic or bronze lustre, it will be appreciated by all lovers of rare and valuable plants. Flowers light salmon-scarlet.

FRANCOIS CROZY.—This variety is identical with Mme. Crozy in habit and general style of growth, but the flowers are bright orange, bordered with a narrow edge of gold, one of the most desirable shades that could be secured. The plants are somewhat more dwarf than Mme. Crozy, and are fairly covered with flowers.

PRICE, STRONG ROOTS, $15.00 PER 100; $125 00 PER 1000.

☞ See our adv. of Novelties in Cannas in last issue.

F. R. PIERSON COMPANY,

TARRYTOWN ON THE HUDSON, NEW YORK.

The New Orleans Exhibition.

This show was a success both financially and otherwise; and it proved to be the finest exhibition ever seen in the south. Competition in all classes was very keen, particularly in floral work.

The hall was decorated very prettily by C. Thomas. There were fine groups of palms, ferns and other specimen plants, which gave a good effect to the hall. The show was very fully attended during each of the four days it was open. The society was greatly aided by prominent people of the city, who gave in all thirty-five prizes, consisting of gold medals and silver cups.

The floral work was very pretty; it included dinner tables, mantel-pieces, bouquets and set designs. The chief winners in these classes were C. Eble, Eichling Bros. and J. H. Menard.

The greatest novelty in plants was John Eblen's new pteris, P. serrulata Eblenii, (recently figured in the FLORIST.) A fine collection of orchids and nepenthes was shown by H. Papworth, gardener to Mrs. Richardson. Emile Valdejo showed some fine cinerarias, geraniums and roses. John St. Mard showed a very fine specimen Asplenium nidus about six feet across, which received a special prize. C. Thomas made a display of summer-blooming chrysanthemums, and J. H. Menard showed some pretty new dracænas of his own seeding.

In the amateur class the principal winners of plant prizes were C. Taube, L. Knauf, H. Papworth, and John St. Mard. A large variety of very fine decorative plants were shown by these exhibitors, including some uncommon and interesting palms. Orchids in various forms were seen in fine condition. The show throughout reflected the greatest credit both on managers and exhibitors. H. P.

ROOTED CUTTINGS.

Alternanthera, Versicolor, Tricolor and Aurea Nana	per 100	.50
Alternantheras Paronychioides	"	.75
Coleus, best old and new	"	$1.00
Fuchsia, leading varieties	"	1.50
Heliotrope, leading varieties	"	1.50
Mexican Primrose	"	1.50
Parlor Ivy, variegated	"	1.50

PLANTS.

Anthericum Picturatum	per doz.	$1.00
Fuchsia, Trailing Queen	"	.75
Begonia, assorted	per 100	4.00
Coleus, assorted	"	3.00
Chrysanthemums, leading kinds, our selection	"	3.00
Heliotrope, assorted	"	3.00
Petunias, double, assorted	"	4.00
Anthemus Tinctoria, a good bloomer	"	4.00
Anthemus Coronaria	"	4.00
Solanum Jasminoides Grandiflora	"	4.00
" Jasminoides var	"	5.00
Var. Parlor Ivy	"	4.00
Fuchsia, best varieties	"	3.00
" Storm King and Phenomenal	"	4.00
Echeveria Gluca	"	4.00
" Extensa Globosa, for centers, plants six inches across	each	.25

Price List on Application.

ROBT. S. BROWN & SONS,
Box 99, Kansas City, Mo.

TO MAKE ROOM,

WE OFFER FOR A SHORT TIME. Per 100.

Begonia—Thurstonii $6 00
" Metallica and Lucille 3 00
Bouvardia—(Root cut, from flats.) Elegans and Davidsonii 1 50
Carnations—(Well established plants from flats.) Mrs. Fawcett, L. McGowan, Grace Wilder and Garfield 2 00
Eucharis—Strong bulbs 10 00
English Ivies—2-inch 2 00
" " 1 year, 2 to 3 feet 10 00
Vincas—Major Variegata, 2-inch 3 00
Foses—La France, 1 year pot grown, wintered dormant 10 00

J. E. BONSALL & SON, Salem, Ohio.
Mention American Florist.

WHERE! OH WHERE?

Can I get GOOD Hardy Ferns this spring and for Memorial Day?

Well, we know of but one place and that is at

A. E. HARTFORD'S,

Also Bouquet Green, Laurel Festooning, Decorative Goods, etc., etc.

18 CHAPMAN PLACE, BOSTON.

CHRYSANTHEMUMS.

NOVELTIES AND STANDARD VARIETIES.

Lowest price on application.

NATHAN SMITH & SON,
167 W. Maumee Street, ADRIAN, MICH.

100,000 VERBENAS. THE CHOICEST VARIETIES IN CULTIVATION.

Fine pot plants. $2.50 per 100; $20 00 per 1000 Rooted Cuttings, $1 00 per 100; $8 00 per 1000.

NO RUST OR MILDEW.

Packed light, and satisfaction guaranteed. Send for circular. . . .

Our sales reached nearly 250,000 last year, and we can assure our customers that our plants are fully equal, and assortment of varieties surpass those of last year.

J. L. DILLON, Bloomsburg, Pa.

ROSES AND CARNATIONS. The Largest and Finest Stock in the Northwest ever offered at the following prices:

ROSES—Perles, Hoste, Sunset, La France, Mermet, Bride, C. Soupert, Niphetos, from 2½-inch pots, $4.00 per 100
Mme. Watteville, Albany, Pierre Guillot, Meteor, from 2½-inch pots 5.00 per 100
American Beauty, from 2½-inch pots 7.00 per 100
CARNATIONS—Silver Spray, Lizzie McGowan, Hinze's White, Hector, Portia, Garfield, Grace Wilder, Fred. Creighton, Mrs. E. G. Hill, from 2-inch pots 3.00 per 100
Rooted Cuttings of all varieties offered 2.00 per 100

Cut Flowers, Roses, Carnations Lilium Harrisii and Smilax at lowest market prices. Telegraph orders promptly attended to. CHRIST HANSEN, Wholesale Florist, ST. PAUL, MINN.

GOODYEAR RUBBER CO.

ALL KINDS RUBBER GOODS.

We make a SPECIALTY in GARDEN HOSE, in both Rubber and Cotton.

A GREAT VARIETY OF HOSE REELS, SPRAY PIPES, SPRINKLERS, ETC.

141 Lake Street, CHICAGO.

Mention American Florist.

Rooted Cuttings

of Evergreens, Hardy Flowering Shrubs and Hardy Perennials (Achillea, iberis, etc.) raised on contract for spring delivery. SEND LIST OF WANTS.

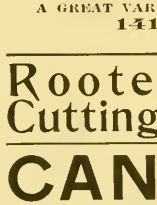
. . . ISAAC C. ROGERS, MOORESTOWN, N. J.

CANNAS

CHRYSANTHEMUMS.

Lowest Prices for Choice Stock. List Free.

T. H. SPAULDING, Orange, N. J.



TRY DREER'S GARDEN SEEDS,

Plants, Bulbs & Requisites. They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.

HENRY A. DREER, Philadelphia, Pa.

Mention the American Florist when writing to advertisers on this page.

SPLENDID STOCK.

		Per 100
Alternantheras P. Major, aurea nana 2-in. pots,		$2.00
Begonias, flowering sorts	2½-in. "	4.00
Coleus, in 12 splendid sorts	2-in. "	2.50
Cyclamen, in bud or bloom	3½-in. "	8.00
Chrysanthemums, 40 splendid sorts	2-in. "	3.00
Dahlias, large roots, 36 varieties	"	5.00
Geraniums, double and single sorts	2½-in. "	4.00
" silver leaved sorts	2½-in. "	4.00
" Ivy leaved sorts, including Jeanne d'Arc	2½-in. "	4.00

HANS NIELSEN, St. Joseph, Mo.

HEADQUARTERS FOR WATER-LILIES

SEED TUBERS AND PLANTS.

Place your orders early if you wish to secure good stock of charming yellow Water Lily, N. Chromatella plants. 1st size, $1.00 each, $10 doz.; 2d size, 75c each, $8.00 per doz. Also, the new French and other new hardy varieties. Send for price list.

Wm. Tricker, DONGAN HILLS, NEW YORK.

Mention American Florist.

Send to THE MOON Company

For Your { Trees, Shrubs, Vines, and Small Fruits.

THE WM. H. MOON CO., Morrisville, Pa.

CUTS!

Wood Engraving, Zinc Etching, Half-Tone, Wax Engraving, Photo-Engraving, Designing.

MANZ & CO., ENGRAVERS.

183 Monroe Street, CHICAGO.

STANDARD HOSE MENDER.

The only Mender using ordinary galvanized wire No. 14, instead of expensive bands. Any person can handle it with perfect ease. Thousands in use and all testify to its Wonderful Merits.

Sample Box, by Mail, 50 cts.

E. HIPPARD, Youngstown, Ohio.

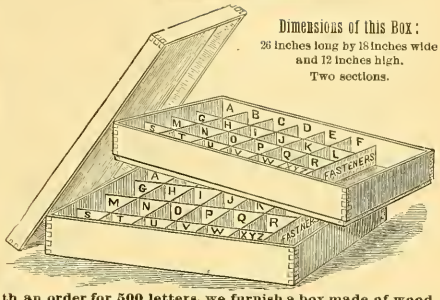
STOTT'S SPRAYER

Read advertisement in next week's issue

U. S. AND FOREIGN **PATENTS** Trade Marks, Designs, Opinions, Searches, &c., promptly attended to. Send sketch or model for free examination as to patentability. All work strictly confidential.

GEO. H. CHANDLEE, Atlantic Building, WASHINGTON D. C.

Mention American Flor st



With an order for 500 letters, we furnish a box made of wood, nicel stained and varnished, such as is represented in the cut.

BOSTON FLORIST LETTER CO.

Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1½-in and 2-in 2.00 per 100. Patent fastener with each letter.

OUR NEW SCRIPT LETTER, $4.00 per 100.

N. F. McCARTHY, Treas. & Mangr. | Address 13 Green St., Boston, Mass.

Address all correspondence to 1 Music Hall Place.

We have a new FASTENER which we consider a decided success. Any customers having old style fasteners which they wish to exchange, can do so without additionel cost by writing us.

AGENTS:

Marschuetz & Co., 25 N. 4th St., Phila., Pa.
A. Kolker & Sons, New York.
F. E. McAllister, 22 Dey St., New York.
A. D. Perry & Co., 33 Warren St, Syracuse, New York.
E. Kauffman, Philadelphia, Pa.
H. Bayersdorfer & Co., Philadelphia, Pa.
A. C. Kendal, 115 Ontario St., Cleveland, O.
J. A. Simmers, Toronto, Ont. Agent for Canada.
E. H. Hunt, 79 Lake St., Chicago, Ill.
Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.
H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O.
T. W. Wood & Sons, 6th and Marshall Sts. Richmond, Va.
Jas. Vick's Sons, Rochester, N. Y.
C. A. Kuehn, 1122 Pine St., St. Louis, Mo.
D. B. Long, Buffalo, New York.

These Letters are handled by all the Wholesalers in Boston.

Mention American Florist.

THE "LOCKLAND" Sash Bars

ARE ALWAYS SATISFACTORY.

This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.

GUTTER MATERIAL, RIDGES, SASH, ETC.

The finest CLEAR CYPRESS used.

Write for circulars and estimates. . . .

LOCKLAND LUMBER CO.

Lockland, O.

Mention American Florist

J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS •

Greenhouse Material,

LOUISVILLE, KY.

Ice Boxes FOR FLORISTS.

All sizes and styles. Correspondence solicited.

KANKAKEE MFG. CO., Kankakee, Ill.

CHICAGO OFFICE: 266-268 Wabash Ave.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

Clear Cypress, from bottom gutter up is my specialty.

Lyman Felheim, ERIE, PA.

Salt as a Fertilizer.

ED. AM. FLORIST: Some time since someone asked how salt would do as a fertilizer for smilax. I would like to ask another question: How would salt work on asparagus? As the original wild form of asparagus is found along the Mediterranean coast, it is naturally a salt-loving plant. The garden varieties like salt; why should not salt be used on our greenhouse form? As I have never had occasion to use any on this variety myself, I would like to know if some florist has tried it, and if so, with what result. F. J. ULBRICHT.

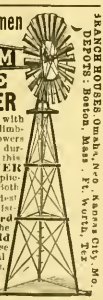
Anniston, Ala.

Referring to above question, we quote the following opinion from the new book, "Manures, How to Make and How to Use Them," by Frank W. Sempers, published by W. Atlee Burpee & Co. 'Until recently the peculiar action of salt upon soils very rich in nitrogen has not been clearly understood. It is now known that in many soils potash, lime and magnesia can be made available for plants by an application of common salt. Its action is to decompose the double hydrous silicates of calcium, potassium, and magnesium, and thus serve indirectly a very useful purpose. Salt displaces, first, lime, then magnesia and potash and some phosphoric acid. Prof. Storer has suggested that the physiological action of salt in checking the growth of straw and stalks on lands highly charged with nitrogenous manures, may be due to the chlorine in the salt which acts to restrain the growth rather than the sodium; also that the salt may kill or hinder the development of the nitric ferment, or some other organism that makes the soil nitrogen active,—or that perhaps the effect of the salt may be due to a general weakening of the plant.

"Some plants have the power to resist the injurious action of salt. It is a common practice to use salt for manure on asparagus beds, but the opinion is gaining ground that the salt does more good in killing weeds than in furnishing food to the asparagus."

FOR Florists, Nurserymen & Seedsmen

GEM STEEL GEM WIND ENGINE AND GEM STEEL TOWER



The GEM ENGINE, when furnished with Graphite Bearings, requires no oiling, no climbing of towers, no hinged or frail-jointed towers and practically no attention, yet is more durable than other Wind Motors that require all this and more unique in finish. The GEM TOWER combines beauty, strength, durability, simplicity to the greatest extent and has no equal. Both are manufactured and guaranteed by the oldest and most reliable Wind Mill Company in existence, and who build the Halladay Standard Pumping and Geared Wind Mills, the Standard Vaneless and U. S. Solid Wheel Wind Mills, Pumps, Tanks, Horse Hay Tools, &c. No other company offers equal inducements. Send for Catalogue and Prices.

U. S. WIND ENGINE & PUMP CO. BATAVIA, ILL., U. S. A.

BRANCH HOUSES: Omaha, Neb., Kansas City, Mo. DEPOTS: Boston, Mass., Ft. Worth, Tex.

PLANT BED CLOTH.

CHEAP SUBSTITUTE FOR GLASS on Hot beds, Cold Frames, etc. Three grades.

Light, Medium, Heavy.

Used by Florists, Gardeners, etc., invaluable for Tobacco Growers. Protects from frost. Promotes, hardy, vigorous growth and keeps beds warm; will not shrink or mildew. For sale by the leading Dry Goods houses, Seedsmen, Florists, etc. Well known and extensively used. For circulars and samples apply

NATIONAL WATERPROOF FIBRE CO., 50 South Street, - - NEW YORK.

Agents Wanted.

"Standard" Flower Pots.

As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address

The Whilldin Pottery Company,

BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.

Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.

Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.

A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.

We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.

SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY,

Manufacturing the

ELVERSON, SHERWOOD & BARKER

STANDARD FLOWER POTS.

Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bud Pots, etc.

ADDRESS, PITTSBURGH CLAY MF'G CO., New Brighton, Pa.

H. M. HOOKER COMPANY,

57 and 59 W. Randolph Street, CHICAGO,

NATURAL GAS MADE GLASS

FOR GREENHOUSES.

Write for latest prices.

ESTABLISHED 1866.

FLORISTS WIRE DESIGNS

MANUFACTURED BY

N. STEFFENS

335 EAST 21ST ST. NEW YORK.

GLASS

which is absolutely perfect for modern greenhouse construction.

ROCK BOTTOM PRICES.

Send for Estimate. Satisfaction Guaranteed

REED GLASS CO.

65 WARREN STREET and 46, 48, & 50 COLLEGE PLACE, —NEW YORK CITY.—

THE BEST POTS.
THE CHEAPEST.
THE LOWEST FREIGHT RATES.
THE BEST OF PACKING.
THE LARGEST POTTERY IN THE STATE FOR MAKING STANDARD FLOWER POTS.

PRICE LIST OF POTS.

	Per 100		Per 100
2 inch	$3.25	6 inch	$2.20
2¼ "	3.50	7 "	3.50
2½ "	4.00	8 "	5.00
3 "	5.00	9 "	7.50
3½ "	7.25	10 "	10.00
4 "	9.00	11 "	15.00
5 "	13.80	12 "	20.00

Terms: Cash, free on board cars here. Address

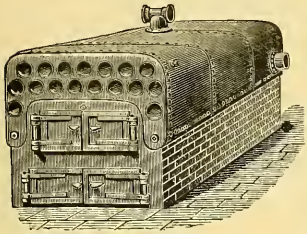
HILFINGER BROS., Potters.
FORT EDWARD, N. Y.

ESTABLISHED 1854.

DEVINE'S BOILER WORKS.

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers

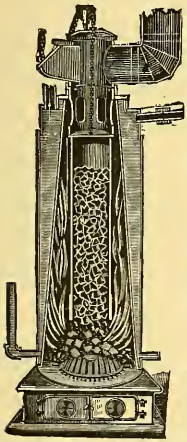


Capacity from 350 to 10,000 feet of four-inch pipe.
SEND FOR NEW LIST.

FRANK DAN BLISH, Att'y,

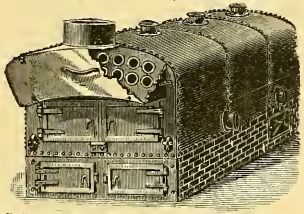
OFFICE, 189 STATE STREET.
WORKS, 56th & WALLACE STREETS.
CHICAGO.

Mention American Florist.



THE WILKS HEATER,
FOR HEATING
GREENHOUSES, STORES, DWELLINGS, ETC.
Manufactured by THE S. WILKS MF'G CO. 123 S. Clinton St., CHICAGO, ILL.
SEND FOR CATALOGUE.

KROESCHELL BROS.
IMPROVED
Greenhouse ×× Boiler,
41 to 55 Erie St., CHICAGO.



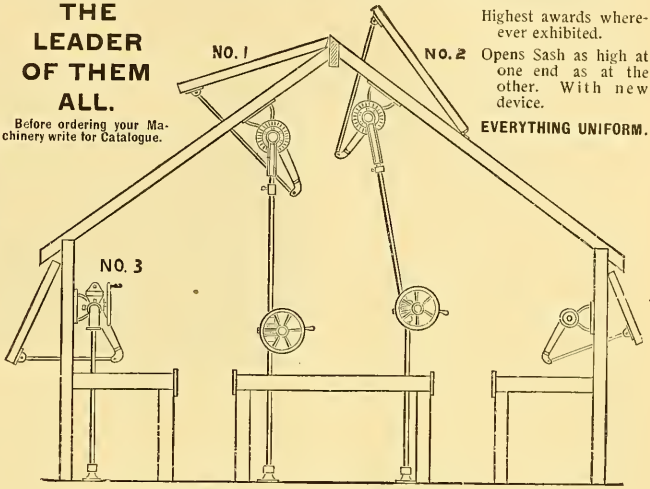
Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around (front, sides and back). Write for information.

FLORAL DESIGNS
The Cut Flower Worker's friend. Fine book of 160 pages. Send $3.50 for it, to
J. HORACE McFARLAND, Harrisburg, Pa.

STANDARD VENTILATING MACHINERY,

THE LEADER OF THEM ALL.

Before ordering your Machinery write for Catalogue.



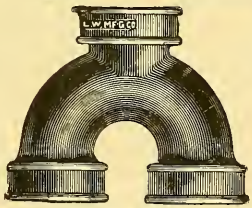
Highest awards wherever exhibited.

Opens Sash as high at one end as at the other. With new device.

EVERYTHING UNIFORM.

E. HIPPARD, YOUNGSTOWN, OHIO.
Mention American Florist.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.
Mention American Florist.

L. WOLFF MFG. CO., 93 to 117 W. Lake Street, CHICAGO.
WRITE FOR ILLUSTRATED CIRCULAR.

Pat. 1882, '85, '86, '88, '90, '91.

ARMORED

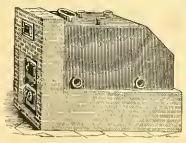
FOR WATER, AIR, STEAM, ACIDS, OILS, LIQUORS, GAS, SUCTION,
And for any and every purpose for which a hose can be applied.
Sizes, ¼-inch to 42 inches diameter.
The making, vending or use of any Serviceable Armored Wire Bound Hose not of our manufacture is an infringement on one or more of our Patents. The rights secured to us render each individual dealer or user responsible for such unlawful use with all the consequences thereof. For prices and discounts address WATERBURY RUBBER CO., Sole Mf'rs and Owners of all the *Sphincter Grip Armored Hose Patents*, 49 Warren Street, New York.
J. C. VAUGHAN, Agent, CHICAGO.

FIRST-CLASS CERTIFICATE OF MERIT.

PERFECT DRAINAGE **BENCH TILE** • Used by all the leading Growers and Horticultural Builders.

For testimonials, circulars, etc., address
W. P. WIGHT,
UPLAND GREENHOUSES, : : : MADISON, NEW JERSEY

YOU CAN SAVE MONEY BY PURCHASING, AND GLASS BY USING
HAMILTON'S PATENT SASH LIFTER.
"It works like a charm." So say those who use it. Send us 50 cents for one sample and you will say so too.
BAY STATE HARDWARE CO.,
272 Freeport Street, BOSTON, MASS.



GREEN-HOUSE HEATING.
MYERS & CO.
1518 & 1520 S. 9th St., PHILADELPHIA.
Send for catalogue and price list.

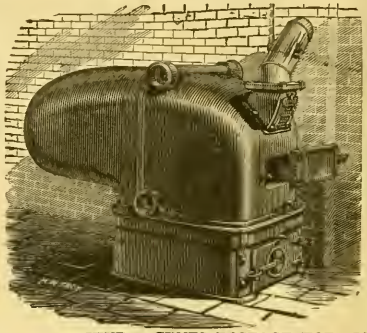
Index to Advertisers.

Adv. Rates, etc 940
Allan C E..... 945
Anchorage Rose Co .. 938
Asmus Ernst..... 939
Baird Chas A..... 943
Baker Phebe A 938
Baller F A 946
Barnard W W & Co.... 938
Bay State Hdw Co..... 951
Bayersdorfer H & Co .. 940
Baylis Henry W..... 941
Berger H H & Co..... 942
Bonsall Jos E & Son 942 948
Boston Letter Co. .. . 943
Brauer & Richter 944
Brotherton W A & Co.. 944
Brown R S & Son ... 948
Brown & Cantield 939
Burns & Raynor..... 941
Burrow J G..... 943
Burton John.. .... 939 941
Carman R W..... 946
Carmody J D..... 952
Chandlee Geo F 949
Chipman Bros 946
Cibitty H E..... 949
Cliffe David..... 939
Coles W W 939
Connelly John J 944
Cook John..... 939
Corbrey T J & Co..... 941
Crosman Bros 944
Devine's Boiler Wks.. 951
De Witt Thomas.. ... 945
Dillon J L..... 948
Dreer H A..... 948
Elliott J Wilkinson... 943
Elliott W H..... 940
Ellison Wm..... 940
Faust H G & Co..... 942
Felheim Lyman.... ... 946
Felthousen J E..... 944
Field S B..... 944
Frost James 943
Gardner John G 943
Gibson J C..... 944
Gonzalez & Co 943
Goodyear Rubber Co .. 948
Hagemann & Titzck ... 942
Hall Ass'n..... 952
Hammond Benj..... 943
Hancock Geo 945
Hansen Christ 948
Hart James..... 941
Hart Michael A 941
Hartford H E..... 948
Helmi Jos..... 946
Heite Floral Co 946
Henderson John Co .. 939
Herr Albert M..... 945
Hess Henry..... 943
Hews A H & Co..... 950
Hillinger Bros..... 950
Hill E G & Co. 945
Hippard E..... 949 951
Hitchings & Co..... 952
Hoffmeyer C K..... 946
Hooker H M Co..... 950
Horan Edw C..... 941
Horan James..... 945
Hulsebosch Bros..... 945
Hunt E H..... 941
Hunt M A..... 938 939
Hunter & Purdy... .. 941
Irvine John Co..... 946
Kankakee Mfg Co..... 949
Kaufmann Ernst & Co. 940
Kemble Floral Co 938
Kennicott Bros..... 941
Koffman E 940 946
Kroeschell Bros..... 951
Kuehn C A..... 940
Kuyk K J..... 942
Lampert J J 938
La Roche & Stahl..... 940
Lockland Lumber Co... 949
Lombard R T 945
Long Dan'l B..... 940
McBride Alex..... 944
McCarthy N F & Co.... 941
McFarland J H. 951
McFarland J H Co..... 944
McGowan John. 945
Manz J & Co..... 949
Marschuetz & Co..... 940
May John N 946
Meech F J & Son..... 943
Mendenhall R J..... 944
Meyer John C & Co ... 944
Michel Plant & Bulb Co 43
Millang Bros..... 941
Moffatt G J..... 942
Moninger Jno C..... 952
Moon Samuel C..... 946
Moon Wm H Co 939
Moore Frank L..... 939
Myers & Co 951
Nanz C G..... 944
Nanz & Neuner. .. 938 939
National Fibre Co ... 950
Nielson Hans 948
Niles Centre Floral Co. 941
Noack G 942
Oelrich Anton 143
Olson M..... 941
Ouwerkerk P..... 946
Peck & Sutherland..... 941
Pennock C J..... 945
Pennock C J, Sec'y.... 945
Pennock Sam'l S. 940
Pierson F R Co.
..... 938 943 944 947
Pillsbury I L 945
Pittsburg Clay Mfg Co. 950
Povall Mrs E T 943
Prince A F & Co..... 941
Randall A L..... 941
Reed John 940
Reed Glass Co 950
Renard Joseph..... 945
Rimbaud Benj..... 942
Roberts D H..... 944
Roehrs Theo..... 941
Rogers Nurseries..... 948
Rolker A & Sons..... 940
Russell S J..... 940
Sander & Co..... 943
Schulz Jacob..... 938
Shelmire W R..... 945
Sheridan W F..... 941
Sherwood Hall Nur Co 943
Siebrecht & Wadley.... 943
Siptle Doppler & Co.... 950
Situations, wants. 938
Smith C A Floral Co... 939
Smith Henry 946
Smith Nathan & Son... 948
Spaulding T H..... 948
Spooner Wm H. 939
Stahl Wm..... 949
Steffens N..... 950
Stott Garden Imp Co 949
Struck J N & Bro ... 949
Styer J J 945
Sundermeier H L 941
Swayne Edw..... 945
Swayne Wm..... 945
Tilton Bros 938
Tricker Wm..... 948
U S Wind Engine & Pump Co 950
Vaughan J C. 946
Waterbury Rubber Co. 951
Weathereds Sons T W. 952
Weeber & Don..... 943
Welch Bros 941
Whilldin Pot Co..... 950
Wight W P..... 951
Wilks S Mfg Co..... 951
Wisconsin Flower Ex.. 941
Wolff L Mfg Co..... 951
Wood Bros..... 945

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

GREENHOUSE HEATING AND VENTILATING

Horticultural Architecture and Building.



HITCHINGS & CO.

Established 1844.

233 Mercer St., New York.

FIVE PATTERNS OF BOILERS.

NINTEEN SIZES.

Perfect Sash Raising Apparatus.

Rosehouses, Greenhouses, Etc., of Iron Frame Construction, Erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frame Benches with the "Perfect Drainage Bench Tile" or Slate Top.

SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUE.

WEATHERED'S DOUBLE DOME BOILERS

Are the Very Best.

OUR

Patent Rocking

AND

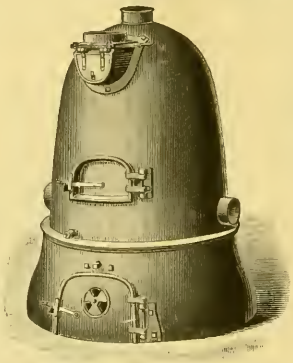
Shaking Grates

ARE

ABSOLUTELY PERFECT,

Being in the smallest sections are the least costly to keep in repair.

Send 3 Cents Postage for CATALOGUE and please mention this paper.



Proven by 40 years

USE

Effective and Durable.

PATENT

Sash Raising Apparatus.

ROSE HOUSES, GREEN HOUSES, ETC.

of Iron Frame Construction, erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frame Benches with Drainage Bench, Tile or Slate.

THOMAS W. WEATHERED'S SONS, (Incorporated) **244 CANAL ST., N. Y.**

CYPRESS GREEN HOUSE MATERIAL

CLEAR

CYPRESS

SASH

BARS

HOT BED AND VENTILATING SASH.

JOHN C. MONINGER,

297 Hawthorne Ave.,

CHICAGO, ILL.

EVERY BODY TELLS ME,

AND NOW I TELL YOU

THE "NEW DEPARTURE"

Is the BEST and the Cheapest

Ventilating Appliance

That has ever been Introduced for **FLORISTS'** USE.

See This man Says about it.

MACOMB, ILL., Feb. 21, 1893.

MR. J. D. CARMODY, *Dear Sir:*

The ventilating apparatus received of you we finished putting up yesterday, and it works fine—I don't know how any one could ask more—as it raises the windows in a 100-foot house easily and evenly. If I had known a ventilating apparatus could be bought for so little money I would have ordered one for the house I built last year; and if I build another next year you can count on an order.

Very respectfully, I. L. PILLSBURY.

J. D. CARMODY, - - Evansville, Indiana.

When writing to any of the advertisers on this page please mention the American Florist.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. **DO IT NOW.**

JOHN G. ESLER, See'y F. H. A., Saddle River, N. J.

THE AMERICAN FLORIST

A WEEKLY JOURNAL FOR THE TRADE

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, APRIL 13, 1893.** **No. 254**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company.
Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,

322 Dearborn Street, CHICAGO.
Eastern Office: 67 Bromfield St., Boston.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis, Mo., August 9 to 12, 1893.

CONTENTS.

Miscellaneous seasonable hints 953
Carnations—Seasonable hints 954
—Carnation Uncle John 954
—Chemical constituents of the carnation . . . 954
Cyclamens at the World's Fair (with 3 illus) . . 954
Cut worms eating smilax (illus) 956
Forcing bulbs 956
Tuberous rooted begonias 956
Boston 957
New York 958
Philadelphia 959
Chicago 960
St. Louis 960
Buffalo 962
Plant shipments 964
The seed trade 966
Baltimore 966
Catalogues received 966
Indianapolis 968
Patents recently granted 968
Hartford, Conn 970
Worcester, Mass 972
The rose number 972
Southern violets 974

PLEASANT HILL, MO.—A curious feature at the establishment of Mr. G. M. Kellogg, who has 36,000 feet of glass here, is that everything seems to be planted in the same soil and all treated alike. Beauties, Mermets, Brides, Wooltons, Perles, Niphetos, La France, etc., all have the same temperature and conditions and all are doing equally well. How will some of our rosarians explain this? His blooms are not extra large, but are of fair size and even in quality, and he finds a market for his entire cut.

DO YOU WANT an alphabetical list of the chrysanthemums in commerce in America, with class and a brief accurate description of each one, and synonyms noted? You will find such a list in our new trade directory and reference book.

PLEASE WRITE on your printed letter head when addressing our advertisers. If you have no printed letter head, then enclose your business card or bill head.

YOU CAN'T AFFORD to do business without a copy of our trade directory and reference book.

Miscellaneous Seasonable Hints.

The operation of shifting many plants from 2 to 3-inch or from 3 to 4-inch, their last shift before selling, will now engage a large part of your time. Everyone that owns a greenhouse is bound to think they are experts at potting plants, but how few there are, excepting the rapid workman to be found in large commercial plant growing establishments, who can shift plants rapidly and thoroughly well! Great quickness at this simple and necessary operation is no indication that the work won't be well done, but just the reverse. It is one of the few and most important mechanical parts of our business, and expert handlers of pots and soil have come from boys who learned to pot before they were 16.

It is almost impossible in writing to give instructions how properly to shift a plant, say a 3-inch to a 4-inch. This is how I have seen it done in many places and how *not* to do it: A little soil is thrown into the bottom of the pot, the plant is then carefully placed in the center at equal distance from all sides, a couple of handfuls of soil are then placed on the surface, and then begins a performance that resembles a pot maker turning a pot. The thumbs are busy pressing down the soil, while the pot is slowly made to revolve. By this method you will get the soil quite solid near the top and very loose below, and many times you will find actual spaces round the old ball, which I call mouse holes.

A good hand with a boy to bring plants and pots and another to carry off and set the plants should shift ordinary plants (say geraniums) from a 3 to a 4-inch at the rate of 500 an hour, and this is how he does it: While he throws a little soil in the bottom of the pot with his right hand he grabs with his left the plant round the stem with the thumb and first two fingers, then resting his hand on the edge of the pot on his fourth finger he leans the plant towards him and places the soil in the space made by leaning the plant over, then with a rapid *half* turn of the pot the plant is again inclined towards him and the space on the opposite side filled up, and then the plant is squeezed down with one quick movement. A rap on the side of the pot as you pass it away will settle the soil a little even, but that is of little consequence, as water will do that. I only take the size I have mentioned, as an example; smaller sizes should be handled of course more rapidly, and with over 5-inch the operation is altogether slower. In hard wooded plants, such as azaleas, camellias, pimeleas and many others, the shift is usually small, say from a 6 to 7-inch or 10 to 12-inch; then it is quite necessary to use a thin blunt stick to properly firm the new soil. The plants last mentioned are valuable and one may be worth the price of a dozen or hundred of the common soft wooded plants, and time and care will repay in their handling. Never shift plants when they are dry, that is, in the condition when they want water. If you do, the water will readily run through the new soil, leaving the old ball dry. You may perhaps have noticed a batch of fuchsias or geraniums with their lower leaves turning yellow just after being repotted; that was the cause—dry when shifted.

If you are growing any chrysanthemums for large specimens, either as standards or bush plants, you have of course started several months ago to grow them along, and the chief point in their culture is never let them get stunted and hard wooded. Keep them shifted and growing. If you have a lot of young plants in 2 inch pots that you intend to plant on your benches for cut flowers or as good medium sized market plants, take off the cuttings and throw the plants away. It is two months too early to plant for either purpose and the plants now in 2 and 3-inch pots will be useless by that time. If you are short of any particular variety, you can shift those on and get plenty of cuttings yet.

It is well to note the plants that have given most satisfaction to your customers this winter. From actual experience in my own dwelling house, as well as those of many customers, the plants that have done really well is limited. Cyclamens with everyone; primulas; azaleas, as long as they remain in flower, which is quite as long as they do in the greenhouse; cinerarias, fairly well; hyacinths and Lilium Harrisii, about as well as in the greenhouse. Although the sale of orchids for house plants is, and likely to be, limited, yet a few well flowered Dendrobium Wardianum have been most satisfactory, lasting a full month in a moderately cool room. Of all the palms that do well in a dwelling under the care of Bridget none equals Kentia Belmoreana and Forsteriana. Tell the people honestly what is a good house plant and you will increase your trade. Don't make a sale on the strength of the plant dying and your getting a call to fill its place. Better sell a customer a nice plant once a month than get them "tired of trying to keep plants."

This is, after all the hard winter, a rather early spring for outdoor operations. If you have not already sown sweet peas do so at once, just as soon as the soil is fit to dig or plow. Sow deep, four or five inches, and well firm the soil over the seeds with your feet. Plant your gladiolus for early bloom at once. Two useful flowers—candytuft and mignonette—can be sown just as soon as the ground is dry.

If you grow any herbaceous plants such as pæonies, delphiniums, and in fact all this class, and you want to increase your stock, now is the time to lift and divide

them. If divided now they will never know they were disturbed. The fall is perhaps as good a time, but you may have forgotten it then.

In my last week's "hints" an unfortunate error occurs. It reads "with few exceptions perhaps none of the young seedlings should be planted deep." I fully meant it to be understood that "all young seedlings (with few exceptions) *should* be planted deep—that is, the seed leaves should be scarcely anything above the surface of the soil." WILLIAM SCOTT.

Buffalo, April 10.

Seasonable Hints.

We can not see that special directions are necessary in the preparation of the ground. It should be plowed and cultivated much in the same way as for raising a crop of vegetables. We believe in a rich soil, but well rotted manure only should be used. Even in this particular there may be a difference of opinion. We have heard of fresh manure being used without any bad effects. A level piece of ground or but slightly sloping is to be preferred. If there is much of a grade the plants are apt to be washed out. In addition to stable or barnyard manure fine ground bone, wood ashes and lime are excellent manures. We have seen fine carnations grown on a stiff clay by using a heavy dose of coal ashes. There may be no particular fertilizing properties in the coal ashes, but they lighten the soil and make it more friable. We want the surface of the soil as fine as a garden and we always rake it with a hand rake before marking out.

We advocate close planting, not being in favor of horse cultivation. The improved garden cultivators make the work of hoeing so easy that it is a waste of space and material to spread the plants over any more ground than absolutely necessary. We make the rows twelve inches apart (which we find ample for all the varieties we have grown) and from six to ten inches in the row according to the kind and the expected growth they will make. Some growers cross mark their ground and work both ways, but we could never see any special advantage by so doing. However, these are all matters of detail that can safely be left to the individual judgment. The main point is to have the plants properly and carefully set. They should be handled so as not to break the balls nor to expose the roots too long to the action of the sun or a drying wind. With this end in view the plants must not be dropped much faster than they are being planted. Have them set firmly in the soil and but little deeper than they stood in the pots. When the man has completed a row have him return tramping on each side the row and close to the plants. This is a great help in starting the young carnations in case of dry weather. W. R. SHELMIRE.

Avondale, Pa.

Carnation Uncle John.

We have received blooms of this new white carnation from Mr. Dorner of La Fayette, Ind., the originator. It is an exceedingly attractive thing, the flowers being pure white, with a faint creamy tinge in the heart. The petals are very full, slightly serrated, and the shape is very regular. The calyx is very strong, having the firm, somewhat inflated points seen on so many of Mr. Dorner's varieties. The stems are very long and firm and the flower has a delicious clove fragrance. Mr. Dorner tells us that the plants have been in bloom constantly from September on, and are now covered with flowers and buds. So far as can be judged now this variety possesses features of excellence which should give it a permanent rank with our growers.

Chemical Constituents of the Carnation.

[*Extracts from letter addressed to Mr. W. R. Shelmire, Avondale, Pa., and which he has permitted us to publish.*]

At least one carefully made analysis of the carnation has been made already, including separate analyses of the root, stem, leaves and flower. It was made by Rudolph Andreasch in the laboratory of R. Maly, at Graz. The flowers were taken from two and three year stocks of a full, red-flowered variety of the carnation (D. caryophyllus); the roots and stem were taken about the middle of March, just when the leaves were budding out; and the leaves and flowers at the beginning of June; of the flowers only the petals were taken. The roots were one-tenth to three-tenths inch in diameter, and the stems five to six inches high. Of the flowers, 10,000 were required, giving 180 grammes of air-dry matter. Unfortunately, the data given do not enable us to compute the ash contents of the whole plant, the analyses having been made with a different end in view. However, they may be of interest to you, so give the figures (per cent).

	ROOT.	STEM.	LEAVES.	FLOWER.
Pure ash,	5.64	5.26	4.44	5.59
Potash,	23.33	23.00	35.51	49.41
Soda,	0.85			
Lime,	45.26	45.16	27.69	5.85
Magnesia,	4.43	5.48	8.27	3.68
Oxide of iron,	3.83	7.95	6.42	7.19
Oxide of manganese,			Good traces.	
Alumina,	2.56	Traces.		
Phosphoric acid	11.22	10.25	10.91	14.84
Sulphuric acid,	2.59	6.46	4.59	4.04
Silica,	5.34	0.61	3.71	4.25
Sodium chloride,	0.59	0.44	0.71	2.85
Potassium chlor.		0.65	2.16	8.39
	100.00	100.00	100.00	100.00

So that the flower has much more potash, iron, phosphoric acid, sulphuric acid and alkaline chloride than the rest of the plant, and very much less lime.

However, this knowledge is not enough to tell us what fertilizer we should apply.

In the first place, the soil will supply a portion of these needed foods, and the amount supplied will depend upon the nature of the soil, and its treatment.

In the second place, there is no doubt that under identical conditions of soil and climate, two different plant species will exhibit different powers of taking up from the mineral and other soil constituents what they need.

In the third place, a difference in the excess of food supplied, and especially in that of the several ingredients supplied, often exerts great influence on the development of special organs, both as to the rate, earliness and extent of their development.

You will at once perceive that while the average composition of a plant may enable us to judge of its exhausting tendencies, and what plant elements must, in the end, be most rapidly removed, it will not serve to inform *us* exactly what is needed for the present growth of the crop, outside of the supply that is already provided by the soil.

To determine this for given soils will require exact experiments, and experiments having in view the peculiar needs of the plant, and the special developments required. WM. FREAR.

State College, Pa.

Cyclamens at the World's Fair.

We present illustrations of some characteristic cyclamens at the World's Fair. The individual flowers are life size, the plants considerably reduced. The flowers figured show four forms of the giganteum class, and one of the original type, C. persicum. The plants figured are giganteum only.

Mont Blanc, which occupies the central position in the flower group, is unquestionably the finest of the whites. The flower is very large, petals wide, and pure white throughout, without any color at the base. The leaves are very deep green, without noticeable markings, and the flowers are very abundant.

Rosy Morn, a very fine pink; color delicate, with deep pink base; leaf much blotched with silvery green.

Crimson King, a good deep crimson, strong grower, flowers large, but rather less than Rosy Morn. Leaves faintly margined and veined with silvery green.

Magnificum, very large flower, unusually long foot-stalks, white, slightly suffused with faint rose, cerise base. Leaves margined with silvery blotches.

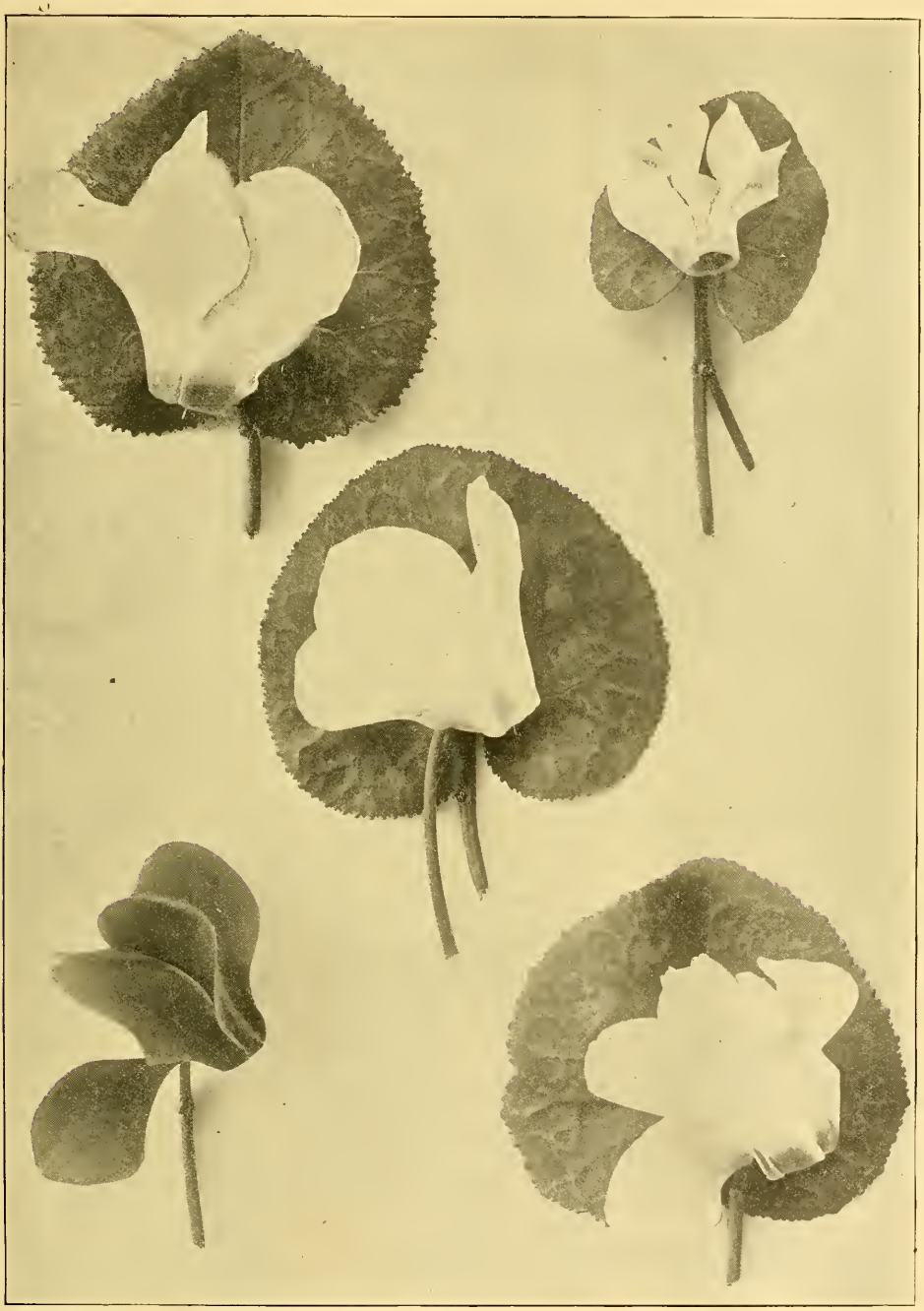
The individual flowers show a remarkable difference in size between the ordinary persicum and giganteum, and the difference is quite as marked in the coloring. The characteristic persicum is white, with claret purple base; the beautiful pinks and crimsons which now attract us are garden hybrids. It will be noticed that there is difference in habit displayed by the various sorts. Crimson King is exceedingly close and compact, both leaves and flowers keep densely together, while Rosy Morn spreads outward. The same difference may be noticed in the plate of Mont Blanc and magnificum, the former having a close habit, though its leaves are not so dense as Crimson King, while the latter is more open and spreading.

Among other fine named sorts at the Fair, mention must be made of C. giganteum sanguineum; the flower is of moderate size, but the color the finest deep blood red. C. g. superbum is a large white, irregularly blotched with carmine; Emperor William, rose, carmine base, leaves very distinctly margined.

Some strains showed various oddities of form, as well as color, one showing the petals spread out laterally, like the ray-florets of a daisy; this seemed to us a step backward, rather than an advance, for the odd characteristic shape, which is one of the great charms of the cyclamen, was entirely lost. It seemed as great a mistake as the double cyclamen which is occasionally held up for our admiration.

The plants figured were in 4-inch pots, which is a very useful size for commercial purposes. The house full of these plants was one of the finest sights seen so far at the Fair; they were grown so evenly that there was very little variation in size to be noted throughout the display; the differences to be noted were entirely in quality of bloom.

A NEW CARNATION sent us by M. A. Hunt, Terre Haute, Ind., was a very attractive fancy sort. The color was white, faintly tinged with flesh, with a



ROSY MORN, BLUSH WITH PINK BASE.

MONT BLANC, PURE WHITE.

C PERSICUM.

CRIMSON KING, DEEP CRIMSON.

MAGNIFICUM, WHITE WITH CERISE BASE.

CYCLAMENS AT THE WORLD'S FAIR. INDIVIDUAL FLOWERS SHOWN LIFE SIZE.

very narrow edge of carmine. The petals were fringed and contained a very few streaks of carmine. Flower very regular and double, growth strong; altogether a very attractive flower.

Cut Worms Eating Smilax.

We have by this mail sent you, under separate cover, a box containing a cut worm, such as annoy farmers in cutting off their vegetable plants in the spring time, also the cocoon of the same worm and the miller or butterfly, but more particularly the family of millers, as they fly at night only. Each came from one of the cocoons that we found.

We send you this that you may, probably, print it in your valuable paper for the benefit of other florists, that may be annoyed as we have been this winter, by this cut worm. We first discovered that something was eating our smilax—that is, the leaves of the smilax seemed to disappear and the stem of the leaf remain on the smilax vines, of course ruining them for florists' use. We could not discover anything eating the smilax, thought it must be the snail, but by accident we found one of these worms crawling up the smilax vine in the day time, eating the leaves. We, on examination found it to be the veritable cut worm that annoys farmers and market gardeners so much. We made a search for the worms in the soil, and we found them there by the hundreds. We looked one of our smilax houses all over and found a great many. They were just below the surface of the ground and some lying under the heavy smilax foliage on top of the ground.

We at the same time had the night fireman go through the house of smilax two or three times in the night, looking for and catching these worms, as they were at their work eating the foliage, and in this way he killed a great many. We found at the same time, in the house adjoining the one where these appeared, full grown, and some young worms in a very young state, eating the smilax. This led us to think that something was laying an egg by which these young worms were hatched, but we could find nothing in the day time. In passing through the houses at night with a lantern, we discovered a miller flying around the lantern; we caught this and found it resembled, somewhat, in its body form, the cut worm, and this led us to think the miller was the outgrowth of the worm, and the worm the outgrowth of the miller. We, on looking in the house where we discovered the worm first, found a cocoon, and we took this cocoon and put it in a flower pot with some soil, and plunged this pot in the smilax bed, and covered it over with a piece of glass. In a few days we found this cocoon had turned into the same miller that is within the box which we mailed you. So, we consider that we have fully demonstrated that the cocoons that we send you will turn into millers, and that those millers will lay the eggs from which hatch the cut worm. We have now quite abolished the cut worm, finding only one or two, in a night, while a few weeks ago we would find a hundred in one night on the smilax strings, eating away for all they were worth. We think the reason our finding so few of the worms now is, because we have killed so many of the millers which are still hatched out from the cocoons that are in the soil. And the one means of which we have a way of catching them, is with the lantern. As they fly around this we catch them and kill them. We think that the cocoons came into the greenhouse in the fall, in the manure that we use to fertilize the smilax. I have never heard of any florists being troubled with this pest, but if they should be the quickest way to eradicate them is by catching the millers. Some other florists may have been annoyed with them, if so, will be pleased to hear from them concerning this, as it may be of vital importance to the trade.

Scranton, Pa. G. R. CLARK.

[We submitted the specimens to Prof. C. V. Riley, Government Entomologist, who writes: "Your correspondent is probably correct in supposing that this moth is the parent of the cut-worm which is injuring his smilax, as the larva of this species is a common and injurious cut-worm. It is a species which I have called the variegated cut-worm and the scientific name of the moth is Agrotis saucia." Dr. Riley referred us to one of his reports in which the insect was figured and we reproduce the figures herewith that the pest may be readily recognized by our readers. ED.]

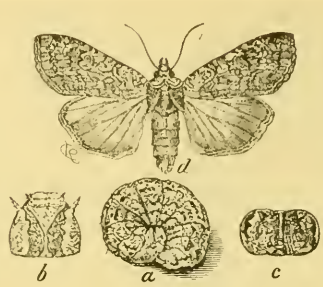


Fig. 1.

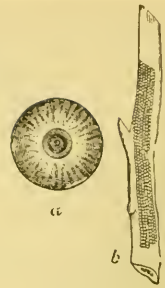


Fig. 2.

THE VARIEGATED CUT-WORM

Fig. 1.—*Agrotis saucia:* *a*, larva; *d*, moth—both natural size; *b*, dorsal view of larval head; *c*, dorsal view of a middle joint of larva—both enlarged. (After Riley.)
Fig. 2.—*Agrotis saucia;* *a*, single egg greatly enlarged; *b*, egg mass as deposited on a twig, natural size. (After Riley.)

The Forcing Bulb Industry.

I read with interest the article on the "Forcing Bulb Industry" in the last number of the AMERICAN FLORIST. It is true that in spring, 1893, there has been a falling off in the inquiry for certain bulbous plants of fully 30% against the previous year. To find and state the true reasons is probably more than any man should undertake to do.

In the first place, allowance must be made for the very severe winter weather, which did not allow of the disposal of overstocks as ordinary winter days permit. Under such discouraging influences of course the high priced first cost of the foreign bulb growers, which require a corresponding high price for the flower, have exposed our domestic bulb growers or florists to a keener loss than if the first cost had been reasonable. But if we take business as a whole, it has been most trying and little satisfactory to most trades and the florist does not stand out alone in finding a less demand for his goods than any other branch of trade. If anything, the spring of 1893 may have been called "a dull season," but since the sun is to come out after a rainy spell, so there will be a boom after a dull period. Give the world at large a chance to make money and they will spend it again. Articles of luxury, nay, even articles which do not belong to every day want of mankind, will be the first to feel the effects of dull times and will be the last to pick up again. It is more than likely that as soon as restored to the equilibrium, during which time our Dutch friends have a chance to reform, the bulbs will be in as lively demand as ever before. Our country keeps on growing and its wants in necessities and luxuries will keep pace. There may be an off-year, but a dinner will taste so much better, if we have skipped a meal involuntarily.

A. ROLKER.

Tuberous Rooted Begonias.

The glorious blossoms of the single and double varieties of the tuberous rooted begonia grown under glass, or in the shade of trees during the fall have made these plants great favorites, and undoubtedly they deserve their popularity when grown in favorable situations such as the above. But our enthusiasts cry plant them out in a tenacious soil, or anywhere that a geranium will grow, for there the tuberous rooted begonia will thrive also. But such is not the case, and many a beautiful spot of former years has been marred by planting these same garden hybrid begonias *en masse* for decorative purposes. I have noticed that in favorable nooks by the seaside, on the north side, and adjacent to the largest rocks, an occasional plant would be surprisingly beautiful, but I have never known a plant so favorably advertised, and from which so much has been expected, which has given so much disappointment in general to the nurserymen, florists and their customers as this same begonia.

The writer is no novice in the matter, having been around London when all the new varieties came out, such as Pearcei, Boliviensis, Veitchii and Vesuvius. About five years ago I imported over two hundred dollars worth in seed of the same, having been led by advertisements to believe that they were hybridized now so that they would stand any climate with soil, temperature and sun suitable for the general run of bedding plants. The seeds were grand, every one germinated, and I got good large plants in early spring, but the result otherwise was a complete failure excepting in the case of those plants used for greenhouse decoration, or the few which happened to get stuck in leaf soil or rotten manure in shady places.

It is not surprising that the tuberous rooted begonia does better in Scotland than in England. The reason for this is the same as for its general failure in the

CRIMSON KING DEEP CRIMSON. ROSY MORN, BLUSH WITH PINK BASE.

CYCLAMENS AT THE WORLD'S FAIR.

United States as a sunny bedding plant. My object in writing these few words of caution is to save further disappointment and failure such as I have repeatedly seen here during the past few years, in many cases flower beds that have cost a great deal of money showing little for the expense and labor excepting black soil from April to November.

NORTHALLERTON.

Boston.

At the meeting of the Gardeners' and Florists' Club at Horticultural Hall, on Tuesday evening April 4th, the following paper was read by David Allen on the subject of

PRUNING.

Pruning is an art made use of by gardeners to assist nature in developing her flowers and fruits to their best productiveness, fruitfulness and quality, and by the forester and gardener to enable them to keep within bounds and in good form our many beautiful trees and shrubs. But of the greater results from pruning few give more pleasure to the eye, the general cultivated taste, and we would suppose to the tree itself judging from the results, than the pruning, lopping or sawing off of dead and decaying branches, which should be cut right back to the sound wood, always cutting in such a manner as will give the bark a good chance to heal over. A tree is as sensitive of a decayed branch on its trunk as we are of having a decayed tooth in our head, and should be looked after accordingly.

A tree is the most noble and beautiful of nature's productions, yet how often do we see them neglected and uncared for even around our lovely Boston. I don't mean to say that gardeners are to blame but the proprietors themselves. There is no name in the English language vulgar enough to fitly describe such ridiculous ignorant taste as we often see displayed; a lawn of velvety, short, green grass, walks raked and rolled, beautiful flower beds all around, everything showing an every day care except that the possibly stately landscape is marred beyond description with rotten, decayed and withering branches on the trees occupying this same lawn, and trying to exist with all their might although uncared for.

Grand and immediate results are obtained from removing the decaying branches of trees, and pruning back some of the projecting sound branches so as to give a symmetrically formed and shapely, yet naturally growing appearance to the tree, always seeing that the larger wounds are oiled or painted so as to keep the sun from cracking the same. In most cases, either with oak and elm or other slow growing trees the results will be exceedingly gratifying, the trees responding even within the year with more luxuriant and glossy foliage. These remarks apply to trees of great age as well as to those that are young, provided the main trunk is healthy and free from disease and its bark in good condition. If otherwise, they cannot be saved and should be taken right out.

Projecting branches of maples and other soft-wood growing trees should be pruned in the fall; that is, where a branch or a side trunk projects too far from the main trunk, spoiling the natural shape and in danger of being torn or split off by severe storms. Such trees are not often growing in the open with light all around but in crowded places where a strong branch will often force its way beyond its natural limit, for nothing else but for light and air.

And now about shrubs. A remark recently made, that "a gardener does not know how to prune, but leaves a shrub pruned like a broom stick;" is I think, to say the least, unfair. Possibly the author of the remark referred to *cheap* gardeners or those that had been in the business but twenty-five minutes, or possibly he was thinking of the owners of these very broom handle shrubs themselves; who knows? It is a remarkable fact that any man or woman who has planted a single geranium will lay claim to the title of gardener.

I know of a well kept estate, except for the pruning of its flowering shrubs. It is located but a few hundred yards on the Boston side of Harvard College. In this place the proprietor has changed his gardener several times within the last seventeen years, still the same shrubs retain their respective shapes which are brooms and handles, ice houses, haystacks or other unnatural growing forms. Surely every successive gardener would not follow thus in the foot steps of his predecessor. Doesn't it look as though the

proprietor had had something to say about it.

The methods of pruning are many, varying according to the character of the shrub to be pruned, and the gardener must know the nature and habits of his subject before he can intelligently use the knife on it. Some require only thinning out, with others that are full grown the aim is to increase the size of the individual flowers. This is the case with hydrangea paniculata. Many of these planted in our public parks and elsewhere seldom or never bloom. The simple reason for this being that they are never pruned. This beautiful hydrangea may be trained in bush, standard or pyramid form. If trained so as to get its flowers well above the surface of the ground to keep them from being soiled it will never require tying, and should always be pruned back to one eye on the last year's growth to produce large blooms.

The well known red and black currant bush will grow and fruit to greater perfection when allowed to throw up its suckers from the root, and having the old wood cut out, leaving room for sunlight and air in the center of the plant. The gooseberry bush, on the other hand always does best on the single stem as a miniature tree. The entire center should be pruned out leaving a single row of branches cup form, all round. By August it will be all filled up again so closely that you won't be able to put your hand there without knowing it.

Althæas and such like that flower on the last year's young wood should have about three quarters of the same thinned out all around, leaving about one-fourth of the young wood evenly distributed all over the plant. With the exception of the finer kinds that are grafted away up on tall standards, it is almost impossible to keep syringas from seading up suckers from the root.

In pruning roses several systems are necessary. The Persian yellow, for instance, should have about one-half of its small young wood thinned out. H. P. Paul Neyron might be cut back to about six or seven buds on its last year's growth, while La France might be limited to three buds.

Evergreens, such as retinosporas, ought to be looked after every year to keep them in proper shape, the eye guiding the hand in the use of the knife. Our favorite Abies pungens does not require any pruning either on its sides or leader. Nothing can enhance its natural beauty. Still a ground branch lopped off now and again, near the ground will not debar it from making a larger tree in a given time than those not so treated. The other abies are much of the same habit, except Douglasii, which will get lanky in the ornamental grounds unless it has a little bit of its leader pinched off, up to the time it is ten feet high, after which it will retain its form well and will be more uniform with its neighbors.

Pruning is a very essential point in fruit culture, indoor as well as out. Many a first-class vinery has been ruined by unskilled pruners, generally by leaving too many buds, seldom if ever by leaving too few. To perform its natural functions each bud requires a certain amount of light, sap and strength. If six growing buds are left on the space required for one the crop will be and ought to be a failure.

The discussion following this essay was quite spirited. In reply to questions by members Mr. Allan said that the long and the short spur systems of pruning indoor grapes are equally valuable. Strong and well ripened wood is the first consideration if fine fruit is to be had. The finest exhibition grapes had been produced on the long rod system but for profitable market results the short spur was better. The Hamburgh will do well for years under the short spur system, but Muscats must have long young wood. The more shallow the border the better. Muscats do better in ten inches of soil than in two feet. In this latitude all roots should be within the limits of the house.

Regarding evergreens Mr. Allan said that he would cut back only in late August, as he feared sun more than frost. To train trees properly in this country a man has got to study the climate and the sun, and should get his experience here and not abroad.

Mr. Dawson said that pine and spruce will not stand pruning back of the foliage, and are not liable to break from the hard wood. He condemned the pruning of fruiting trees when dormant. Pinching back once or twice in midsummer will check the flow of sap and favor the production of fruit buds, but hard pruning in winter results only in the growth of big soft sappy shoots. He advised root pruning as a good resort when trees grow too vigorously. Regarding shrubs he said that in the case of any plant which flowers previous to June 1, no spring pruning is wanted except to cut back dead or weak wood. With hydrangeas, althæas and other late flowering shrubs the harder pruning they get in spring the more and better flowers will be obtained. As to transplanting trees in fall Mr. Dawson said that this is more successful if done before the leaves fall, and further that there is not a day in the year when trees cannot be moved if proper precautions are taken.

A lively discussion on training peach trees both indoors and out, was participated in by Messrs. Dawson, Cotter, Guerineau and Allan, all agreeing that unripe wood is our great trouble in this section, and that unless the sun can reach every part of a tree fruit cannot be expected from it. A question about pruning tea roses carried over the second year under glass, brought up W. H. Elliott, who said that he believed severe thinning out to be a mistake and would approve of little more than the cutting out of the dead wood.

There was no scarcity of flowers at the wind up on Easter Sunday. The bright weather had helped the roses out and there were enough for all, although earlier in the week the heavy shipments by the wholesalers had made them rather scarce for a few days. It is said that some of the retailers bought rather heavily, and did not quite clean up their stock, and there were quite a few plants left over, but dealers in general acknowledge themselves satisfied. Harrisii and longiflorum lilies were sold in larger quantities than ever before, and were well used up everywhere, in fact a good many plants were disposed of which had little to show excepting green buds. Candidums received but little favor, and other classes of bulbous stock were not wanted at any price.

Cut flower trade has been rather quiet since Easter. There is no extra demand for roses. Very fine Brunners are coming in from Wilson's, and the best bring as high as $40 per hundred. Luizets run from $15 to $20 per hundred, and Jacqs. all the way from $12 to $25. Carnations are very scarce, and prices hold up to the highest Easter notch. Wilders, which seem to be in special demand, brieg $4 per hundred, if good. Violets are plenty with prices tending downwards. Bulbous stock is still at the bottom of the ladder.

Out at Mr. C. V. Whitten's place there is a large sign which reads "Beware of the Dog,"—and this inscription is always a subject of timid comment by the visitors who go out once in a while to see Lawrence Cotter's stock, for the dog is a large dog. But Cotter says now that he is about to get a much larger dog and a sign twice as big as the old one, both with special reference to possible calls from parties having forcing bulbs to offer.

The trustees of Cedar Grove Cemetery having had their attention called to a comment in the AMERICAN FLORIST regarding the business in bedding plants conducted there have voted to discontinue the trade.

Lucius T. Peck, of the firm of Peck & Sutherland, died suddenly of pneumonia on the 10th inst., aged 38 years. Mr. Peck was very popular among his business associates and highly esteemed by all who knew him, and his untimely death is deeply deplored. He was for many years bookkeeper for W. J. Stewart and when the latter retired Mr. Peck became the senior member of the firm that succeeded to the business. He possessed excellent business qualifications and had a very promising future before him. He was fond of his home and very happy in his domestic relations. He leaves a wife and two children, whose grief at their irreparable loss is shared by a large circle of friends.

Mr. C. M. Atkinson, gardener to Mr. John L. Gardner, who has been sick for several weeks, is not improving any, and his recovery is very doubtful.

Mr. Wm. Robinson, gardener to Mr. F. L. Ames, has been confined to his home by sickness, for a week.

Mr. Alfred Outram, of London, England, has been in town for a few days.

Mr. A. H. Fewkes showed a handsome seedling canna at Horticultural Hall on April 8. The flower is a large, spotted yellow.

Rhododendrons in this section are in many cases badly winter killed. The long continued very low temperature was more than they could stand.

New York.

Intending exhibitors at the Madison Square Garden show should bear in mind that all entries must be made in writing not later than one week previous to the opening, with the exception of classes "for effect," which close two weeks before the show. The schedule of premiums with full rules and regulations may be obtained by addressing Mr. Henry McCrowe, manager flower show, Madison Square Garden, New York.

The total amount of premiums offered is between five and six thousand dollars. About twelve hundred dollars is devoted to palms, crotons, dracænas, ferns and other decorative foliage plants, the main prize being one of two hundred dollars for the best group arranged for effect and covering two hundred square feet. For best group of flowering plants arranged for effect, one hundred and fifty dollars is offered, and the other prizes for azaleas, begonias, genistas, rhododendrons, roses, etc., bring the total premiums in this class up to about two thousand dollars. Nearly eight hundred dollars goes to bulbous plants, of which one hundred

MAGNIFICUM WHITE WITH CERISE BASE. MONT BLANC, PURE WHITE.

CYCLAMENS AT THE WORLD'S FAIR.

and fifty dollars is for the best group arranged for effect and covering two hundred and fifty square feet.

The classes including table and mantel decorations, baskets of cut flowers, etc., are open to retail florists only. In this, as well as in the section devoted to roses, carnations and other cut blooms, the prizes are rather small, that is if the rule requiring that all exhibits must be kept looking fresh by the exhibitor by replacing faded flowers, under penalty of losing the prize, should be enforced.

At the meeting of the Florists' Club on the 10th inst. two essays were presented, one by James Withers, Short Hills, on tuberous begonias, and one by E. J. Van Reyper of Belleville, on carnations. The latter gentleman being absent, the essay was read by Mr. C. B. Weathered. Mr. Withers predicted that by careful selection and breeding the tuberous begonia would become the leading bedding plant in this country. He said that good retentive loam is the best soil and good results can be assured if plants have plenty of moisture at the roots. But under the hot sun of America we cannot expect many flowers till August. If this begonia does not succeed with some growers it is the fault of the growers and not of the begonia.

The by-laws were changed so that new members can be admitted on the same evening application is made.

A committee was appointed to prepare a schedule for a chrysanthemum show next fall, which is to be given whether or not the Madison Square Garden Company co-operates.

A dozen pictures on the club room walls were donated by Ernst Asmus. The matter of new meeting and exhibition room was assigned to a special meeting two weeks hence.

The next club exhibition takes place the latter part of May.

Fourteen new members were admitted.

Death has taken two more men well known in trade here: C. Thurston, Paterson, N. J., and J. T. Hutchinson of Elizabeth.

There is no scarcity of flowers, all kinds, since Easter. Roses are very abundant and prices run low for large quantities. Quality is excellent as a rule. Cusins are taking on the deep red color which is characteristic of them in spring and fall, and this hurts their popularity considerably. Edward Littlejohn of Chatham, N. J., is sending in some remarkably fine Brides, Mermets and Bridesmaids which bring as high as three dollars a dozen, when eight or ten dollars per hundred is a good price for average quality.

Philadelphia.

The April meeting of the Florists' Club was slimly attended. The boys were no doubt so worn out with the extra business of Easter that they were taking a rest at home. The proceedings were very interesting however for those who attended. Three gentlemen were elected to membership and several names were proposed for action at next meeting. Mr. Farson acted as teller during the election and filled the position so gracefully that he received the thanks of the club.

In lieu of Mr. Taplin's paper on modern methods in palm growing, which will be read at next meeting, a question box was opened and proved very entertaining.

How to secure a better attendance at the exhibitions of the Horticultural society was given up by Geo. Watson, and Mr. Westcott who tried his hand at it, said that the best way in his estimation to get a good attendance was to give a good show, one very much better than the last spring show was needed; there must be a show that will surprise people, one they will go home and talk about and send their neighbors, then the balance sheet would show a profit instead of a loss as at present.

The most popular and profitable Easter plants was answered by Mr. Craig. He said that the Easter trade was the most important in the whole year for the plant grower, he would almost put the week preceeding Easter against any of the months in the year. Well grown plants at this time sell quickly and usually with a good profit. Instead of sending six here and six there they were delivered in wagon loads at a time.

The lily he considered the first on the list of Easter plants. Well grown specimens with from six to twelve flowers and buds usually sold well and with a good margin of profit to the grower. He had found a growing demand for plants with a great number of flowers and buds; they made more acceptable gifts when there were plenty of buds to come on and the public was willing to pay for the promise. There was a great difference in the way plants were grown, the old time tradi-

tion was to count the buds and flowers and charge accordingly, but they were getting to know better now. Some lilies were dear at 8 cents a flower while others were cheap at 12, depending on the condition of the plant. Neither the grower or dealer could handle a lily with two or three flowers on with profit; such plants should all be cut.

The azalea he would place next. If done well it was a good thing for all concerned. It was not as perishable as some other plants and would last in flower two or three weeks, while many things must be at their best on Good Friday.

Hydrangeas come next. They are a very showy Easter plant and the speaker thought should bring more money; they brought more money in New York than here. A variety commonly known as the red stemmed hydrangea should be given more attention. It made a beautiful pot plant and while the flowers were not produced in such large heads as on other varieties it had the advantage in color, being a very deep pink; it lights up well at night. He predicted that more of it would be seen another year. Thos. Hogg was also a good safe variety to grow.

Hyacinths and tulips in pots were not found profitable to handle in quantity, as in the hurry incident to the rush at Easter it was difficult to deliver small and cheap plants. The public are buying better grades of plants and it is best to drop the cheapones.

Genistas he considered valuable Easter plants, and when grown as Mr. Harris had them this year they were among the best things for the season. Spiræa Japonica must also not be forgotten.

Mr. Schaffer said his customers wanted large lilies, the more flowers the better; he could not get enough large plants to supply the demand.

Mr. Hahman found growing pot roses for Easter up-hill work, as it was so hard to get them in on the right days and a day or two too soon or too late made a great difference, particularly with the hybrids. Mr. Craig recommended Clothilde Soupert as a fine pot rose for Easter as it was such a free bloomer.

Mr. Westcott thought all small plants such as English primroses, tulips, pansies, and hyacinths should be put in pans, a number together, and then they could be handled with profit.

Mr. Cartledge thought the bottle brush a fine plant to force for Easter. It was a rare plant but could be grown like an azalea and would sell well. Deutzia gracilis was also spoken of by Mr. Hahman as a plant that did not receive enough attention; it made a very desirable Easter plant.

The May meeting of the club promises to have a full turnout, as after the regular meeting there is to be a smoker. This is an innovation and we think a good one. There will be a lunch provided, a great smoke will ascend and there will be plenty of local talent to afford amusement.

Business has not been as brisk as is usual the week after Easter and growers have had a hard time disposing of their stock, the demand for the large roses being very small. Still the Philadelphia growers don't slaughter prices; if their flowers do not sell well they are carried home. They say the market will only take so many and to reduce the price will not increase consumption.

Prices have weakened a little, the larger teas bringing $6 and a few fine ones 8, while the smaller class sell for from 3 to 4. Good carnations are 1.50, shorts 75 to 1, valley 3, tulips 3 to 4, daffodils scarcer, 3 to 4. Sweet peas are becoming plenty and sell for 2 to 2.50 a hundred. K.

Chicago.

On Friday, April 7, some of our florists suffered severely from the worst hail storm we have experienced in many years. The storm was singularly restricted in its area, being confined to a small section of the south side of the city. The greatest damage was done in the ten blocks from 30th St. to 40th, but east and west it extended over a much wider area. Within the storm belt were the establishments of J. F. Kidwell, J. T. Anthony, S. Muir, E. Hobbs and the Chicago Floral Co. They are all sufferers, but the last named concern suffered the least.

In both loss of glass and injury to plants J. F. Kidwell has the greatest damage. His place, 3820 Wentworth Avenue, is some distance west of the others, and being in an open situation was exposed to the full fury of the storm. It is safe to say that throughout the range of thirteen houses there was not a single entire pane left on the south and west sides, while the other sides were irregularly riddled in numerous patches. So strong was the wind that the fragments of glass were flung right across the houses, cutting and tearing whatever was in their way. In the palm house, latanias were cut and scratched badly, but kentias suffered but little, as naturally the glass slid through the leaves. A batch of good ficus was so lacerated that none of the plants could be used for anything but cuttings. One of the most annoying losses Mr. Kidwell suffered was the destruction of a lot of calceolarias, just coming into bloom. It was the intention to exhibit them at the World's Fair, and they were being grown very carefully. Out of about 700 plants, it is safe to say there was not a dozen perfect specimens left. A majority of them had the tops cut right off, and all the foliage looked as if slashed by knives. It is impossible to compute the damage done to plants, since much of it can hardly be immediately foreseen. The spring bedding plants, on the whole, suffered less than others. Mr. Kidwell's loss of glass is estimated at 25,000 feet. The houses were covered temporarily with muslin, but he is pushing on the work of re-glazing very rapidly.

Next comes J. T. Anthony, whose muslin-covered roofs showed that his damage was large. Although not so much exposed as Mr. Kidwell's place he caught the storm very severely. The palm house running north and south received the full force of the storm, and on the west side the hail made a clean sweep. The houses running east and west caught it most severely on the south side, naturally, but the north side was riddled irregularly in patches. Sometimes there would be a sash almost entire; the next one would be bare. The storm did not appear to make any discrimination between single or double thick; both went equally. But the large panes stood it better than small ones; it was Mr. Anthony's impression that the greater rigidity of the small lights rendered them more liable to breakage. However, there was little to choose between the two. Mr. Anthony's plants suffered considerably; a batch of ficus was ruined, like Mr. Kidwell's; calla leaves were riddled and some azaleas and other stuff caught it severely. A lot of frames, which were only glazed the day of the storm, were entirely stripped of glass. Mr. Anthony's loss will amount to 10,000 feet. At present the wrecked houses are covered with unbleached sheeting; this is being oiled, and Mr. Anthony will try the oiled muslin until there is more time for glazing, instead of rushing the glass in during the very busy season.

S. Muir was another sufferer; his plants were damaged but little, but the glass was gone just as at the other places, the exposed sides being cleaned out, the others riddled. Most of his glass was single thick, but the double thick stood no better. The work of straightening up plants and cleaning out the fragments of glass will be almost as troublesome as glazing. But Mr. Muir, like all the other sufferers, expressed the philosophical opinion that they were lucky it didn't happen the week before Easter, when the houses were full of flowering plants; the spring stuff would get over it. While unable to give an exact computation, it is safe to put Mr. Muir's loss at 5,000 feet.

E. Hobbs suffered about the same loss as Mr. Muir; his plants were not damaged as much as might be expected;

The Chicago Floral Co. seem to have been less exposed than the others; in spite of the extent of glass the damage is but between 1,500 and 2,000 feet. In some places specially exposed the breakage was complete, but in most of the houses it was irregular holes here and there. None of the five places injured carried any insurance. One noticeable feature is the short time the storm lasted. All the damage was done in a period under two minutes. It was just after 6 p. m. when the storm broke, and everything seemed to go in one crash. The hailstones are described as big irregular masses of ice; that they were of unusual size can be judged by the damage done.

The flower trade this week is very dull, and flowers of all kinds are coming in in immense quantities. Lilies are still plentiful, and there is no sale for them. Roses are very good in all classes, but prices are very low. Out door lilac from Southern Illinois is seen in quantity. Bulb stuff is a drug; valley is very good, but other stuff is generally poor. The takirs are blooming out in quantity, and their stands are heaped with lilac and roses. The volume of stuff in the market is far in advance of the demand.

Messrs. A. H. Ewing and Wm. Houston accompanied the Canadian horticultural exhibit from Toronto to the World's Fair, and are now placing same in position in the Horticultural building. The decorative plants they bring are in grand condition, and will make a most effective display. They will remain in the city for about two months.

At the meeting of the Florist Club to be held this Thursday evening, Mr. E. Wienhoeber will read a paper on "How to manage a retail store."

An adjourned meeting of the Horticultural Society of Chicago, will be held at the Sherman House the afternoon of the 22nd inst. At this meeting some amendments to the constitution and by-laws will be acted upon, and details connected with the annual chrysanthemum show next November settled.

St. Louis.

Easter has come and gone, and the general expression is one of satisfaction at the amount of business transacted. There was a decided increase in the demand over former years, some placing it as high as half again as much. There was enough stock to satisfy all, which ren-

dered matters pleasant for all concerned. The churches were decorated about as usual, there being nothing extra at any of them, with possibly the exception of the Second Baptist, which was beautifully arranged by Mrs. Wm. Ellison. An immense white cross was one of the principal points in the work and showed to good effect.

Some complaint was made of the short-sighted policy pursued by some growers in regard to holding back stock. One grower, after letting entirely up on Romans for the two previous weeks, sent in enough the day before Easter to swamp the commission man entirely, the result being a loss to the grower, whereas had they been sent in right along they would have sold clean. The same thing was done with tulips. The result was not as bad, however, as Sanders & Benecke had a heavy tulip decoration the Monday following, which pretty well cleaned up the stock.

Since Easter the annual glut has occurred and is expected to continue for a week or so, by which time business is expected to improve. Chicago, after a short respite, has again commenced to look upon St. Louis as possessing an "aching void" which can alone be filled with her surplus production and is accordingly sending them in at her previous rate. R. F. T.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—As florist and gardener by married man, 20 years in the business. Good references. WILHELM WIGGERSHAUS, 4523 S. Princeton Ave., Chicago, Ill.

SITUATION WANTED—June 1st, by thoroughly practical seedsman of 15 years experience in all branches, can take full charge, compile catalogues, etc. For further particulars apply SEEDSMAN, care American Florist.

WANTED—Young man desiring to learn rose growing, in a first class commercial place. Address R. F. TESSON, West Forest Park, St. Louis, Mo.

WANTED—Prices on all kinds of cut flowers daily delivered from May 1st to October 30th. LOUIS ORTENDORF, 7116 Ellis Ave., Chicago, Ill.

WANTED—Single man, permanent, to grow roses and carnations wholesale, by May 1. State wages and references. W. T. WILSON, Westminster, Md.

WANTED—A permanent place in some western city by an energetic young man, where there is a chance of advancement. Address FLORIST, care American Florist.

WANTED—Two or three men accustomed to general greenhouse work; good wages paid to quick, industrious and steady man. Address J. F. WILCOX, Council Bluffs, Iowa.

WANTED—Single man of energy and ability for roses and cut flower stock. Address with terms and experience J. T. WILLIAMSON, Prop. La Rose Gardens, Memphis, Tenn.

WANTED—Two men to grow cut roses, carnations, and general stock. Steady employment to sober and industrious men. State wages and abilities, with references. Box 577, Peoria, Ill.

WANTED—A competent man as working foreman in commercial place; must be first-class rose grower. Address, with copies of references from former employer and wages required. P. O. Box 188, Madison, N. J.

WANTED—At once, a good grower of roses and general cut flowers, as a working foreman. When writing give references and state terms. None but a first class all round florist should apply. Address O. K. 47, Am. Florist. Also wanted a good assistant.

WANTED—Soon, a competent man as a working foreman in commercial place; must be first class grower of roses, carnations and other cut flowers. Address, with copies of references and wages required; also give other particulars. W. L. MORRIS, Des Moines, Iowa.

WANTED—A young man as assistant gardener on a private place, one having a good general knowledge of gardening and able to furnish satisfactory references as to ability and sobriety; English or Scotch preferred. Address B. P. O. Box 132, Yarmouthport, Mass.

WANTED—By a florist wishing to commence business, financial assistance and good location in thriving town or suburb, where there is an opening for cut flowers, floral work, etc. References as to ability, habits, etc. Address PETALS, care American Florist, Chicago.

WANTED—A competent man, married, as foreman in a commercial place; must be first class cut flower grower and good all round man. Address with copies of references from former employers, wages required and other particulars. Also a single man as assistant. RICHARD SHANNON, Green and Franklin Aves., Brooklyn, N. Y.

FOR SALE—At low figures, my place of three greenhouses, two lots and dwelling. For particulars call or write at once. W. T. STEPHENSON, Petersburg, Ill.

FOR SALE—Large greenhouses with long term lease, 30 acres land, prosperous condition, easy terms, near C. & N. W. R. R., inside Chicago limits. Address W. B. CHAPMAN, 184-186 Washington St., Chicago.

FOR SALE—A No. 1 second hand Exeter boiler, 24 sections, 36 H. P., suitable for hot water or steam, steam gauge, etc.; also several valves go with boiler; price low. CHAS. FOTTLER, Blue Hill Ave., Dorchester, Mass.

FOR SALE OR TO LEASE Cut flower plant containing 36,000 feet of glass in Chicago; in first-class condition, all modern conveniences. Stock in fine condition for the World's Fair year. Address A. T. JACKSON, Bowmanville P. O., Chicago.

FOR SALE OR TO RENT.

The following greenhouse property, situated on the outskirts of Springfield, the City of Houses; or will sell Greenhouses, Stock and Fixtures and give ten years' lease of 2 acres land. Ten houses in all—5 houses, 10 feet wide, 65 feet long; 4 houses, 18 feet wide, 65 feet long; 1 house, 18 feet wide, 65 feet long. Steam plant! New double Florida Boiler. Stock in good condition, with a large and extra good home market. This is an opportunity in a life-time, as present owner has other interests to look after. If you are looking for a chance, apply at once to

N. D. WINTER,
5 Elm Street, SPRINGFIELD, MASS.

TAKE YOUR CHOICE.

FOR SALE—An old established Florist Business at Dorchester, Mass., comprising 20,000 feet of land centrally located, on which are: 1 house 7ox18 filled with Carnations; 1 house 70x16 filled with Roses; 1 house 70x11 filled with Violets; 1 house 70x10 filled with Violets; 1 sash pit 70x7 filled with Violets; 1 dwelling house 7 rooms. Plants in good condition and houses in good repair. Price $6,000.

FOR SALE OR RENT—A well equipped establishment within eight miles of Boston, comprising 8 acres of land on which are 1 house 120x20 filled with Mermets and Silver Sprays; 1 house 100x24 filled with Wilders and Plants; 1 house 100x11 filled with Wilders; 1 house 100x11 filled with Adiantums, 9-in. pots; 1 house 100x11 filled Bonvardia and Portia; 1 house 100x11 filled with Violets and Mignonette; 1 heated frame 100x6 filled with Mignonette; 1 propagating house 55 ft. long. Price $22,000.

FOR SALE—Eight miles from Boston, 1 acre of land, 8,000 feet of glass, including 4 houses, 100x18, 1 dwelling house 7 rooms. Apply to

N. F. McCarthy & CO. 1 Music Hall Place, Boston Mass.

AMERICAN BEAUTY

2¼ inch pots, $8.00 per 100.
3 inch pots, $12.00 per 100.

JOHN BURTON,
Chestnut Hill, PHILADELPHIA, PA.

ROSES.

Albanys, La France, Brides, Mermets, Wootton, Hoste and Mad. Pierre Guillot at $1.00 per 100.
Meteors at $5.00 per 100.

The above is clean healthy stock from 2-inch pots. A specialty made of growing for future delivery. Cash with order.

R. F. TESSON,
West Forest Park, - - ST. LOUIS, MO.

The Grand New Forcing Rose,
"American Belle."

Prices and full particulars on application.
John Burton, Chestnut Hill, Philadelphia

ROSES

I grow all the leading forcing varieties such as

Mme. Testout, K. A. Victoria
Meteor, Wootton, Beauty, Perle, Bride, Mermet, Watteville, etc.

Let me figure on your order for May, June or July delivery, for first class stock.

MUMS. A good stock in 2-in. pots of all the leading cut flower and commercial varieties at $3.00 per 100; $25.00 per 1,000. Guaranteed true to name.

W. W. COLES, KOKOMO, IND.
Maple Hill Rose Farm.

ROSES.

December Propagation.

Fine, clean, 2½-inch stock.	Per 1000
American Beauty	$75.00
Augustine Guinoiseau (W. La France)	55.00
Meteor	45.00
La France	40.00
Perle des Jardins	40.00
Niphetos	40.00
Papa Gontier	40.00
Bride	25.00
Mermet	25 00

CARNATIONS—Out of flats.

Portia	$10.00
Golden Gate	10.00
White Dove	20.00

J. B. HEISS, Dayton, O.
Mention American Florist.

The New White Rose
KAISERIN AUGUSTA VICTORIA.

From 3-inch pots, $35.00 per 100. 5-inch pots, $5.00 per dozen; $40.00 per 100.

THE NEW VIOLET ROBERT GARRETT,

The healthiest and strongest growing violet up to date; strong, well-rooted runners, $3.00 per 100; transplanted runners, $4.00 per 100. Cash with order.

JOHN COOK,
318 N. Charles St., BALTIMORE, MD.
Mention American Florist

ROSES.

TEAS . . . . . $30.00 per 1000
HYBRIDS . . . . . 40.00 per 1000
Healthy plants, in 2-inch pots.
Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.
Trade list on application.

Jacob Schulz,
LOUISVILLE KY.

ROSES FINE HEALTHY PLANTS FROM 2¼-INCH POTS.

Perles, Brides, Mermets, Niphetos, Papa Gontier, Hoste, Watteville, Cusin,
La France, Albany, Wootton, at . . $5.00 per 100, $45.00 per 1,000.
Meteor at . . . . . $6.00 per 100, $55.00 per 1,000.
Climbing Perle, at . . . . . $10.00 per 100.

John Henderson Co.,
FLUSHING, N. Y.

Buffalo.

The Easter trade seems to have been highly satisfactory to all concerned. Roses, violets and carnations decidedly took the lead in flowers, and in first class roses the supply was short. The sales of plants were much in advance of former years. While lilies and azaleas went off best any nice plant sold. Spiræas, cinerarias, cyclamens and hyacinths were all in demand. There were not enough lilies to go round, although the city seemed full of them, and more good azaleas could have been sold. There was not as much bulbous stuff forced for Easter as in some other years, and for what there was the demand was light. Still by Sunday noon there was little left of anything.

While all the leading churches that usually decorate did something it was not as elaborate as in the past, and designs for churches have become almost obsolete. Yet this is all and more than made up by the wonderful increase in private orders, a large proportion of which is a box of flowers or a plant sent to friends. And although these orders entail an enormous amount of work in delivering there is certainly more in it for the retailer than the church orders.

Mr. James Dean, having had little encouragement in the way of an exhibit for the World's Fair from our end of this great state, has appealed to the Buffalo Florists' Club to do something for the credit of our city and vicinity. His communication was earnestly discussed at our last meeting and all agreed that an effort should be made to have our city represented, even if it were to a limited extent, and a committee of two was appointed to collect and forward exhibits. The committee is Wm. Scott and John F. Cowell. Exhibits will soon be solicited from all likely to contribute, but any florist or private gardener of Buffalo or neighborhood noticing the above, who can possibly contribute towards the exhibit, is earnestly requested to communicate with either member of the committee at once. It is I suppose generally known that the freight on plants will be paid to and from Chicago and all expense of packing paid, and will of course be under the care of experienced men while at the Fair. W. S.

Do you want a list of the leading park superintendents of America? You will find such a list in our trade directory and reference book.

Golden Returns.

200,000 ROSES 200,000

We offer well established, healthy plants in below named and many other sorts:

From 2-inch pots, $ 3.00 per 100; $30.00 per 1000
From 3-inch pots, 6.00 " 60.00 "
From 4-inch pots, 12.00 " 120.00 "
Not in excess of any one variety.

50,000 Hybrid Perpetual Roses 50,000

at $4 per 100; $40 per 1000, in 50 select varieties.

New and Rare Varieties at Special Rates given in our Wholesale List, now ready.

WE NAME A FEW SORTS ONLY:

Aurora, Bosanquet, Comt. de Labarthe, Bon Silene, Cels, Devoniensis, C. Mermet, Etoile de Lyon, Hermosa, Mme. Cusin, H. M. Stanley, Malmaison, Marie Guillot, Mme. Lambard, Marie Lambert, Maréchal Niel, Kruger, Niphetos, Mme. Jos. Schwartz, Safrano, Perle des Jardins, Sombreuil, The Bride, etc., etc.

For anything in the Florist line, or send your lists to us priced. Address

NANZ & NEUNER,
LOUISVILLE, KY.

SUNNYWOODS GREENHOUSES

THE BIRTHPLACE OF

BRIDESMAID

Its pink color is permanent; it is never deformed; it steadily outsells the Mermet; it is a famous keeper.

IT WILL **PAY** YOU TO

throw away your Mermets and plant Bridesmaids instead.

FROM 2½ INCH POTS:		FROM 3½ INCH POTS:	
50 Plants	$ 7.50	50 Plants	$10.00
100 Plants	10.00	100 Plants	15.00

When cash comes with order, I prepay express.

FRANK L. MOORE, Chatham, N. J.

MADAME CAROLINE TESTOUT.

The best rose of its color in existence. It has been fully tested in the New York market and

IT SELLS.

Healthy plants from 2½-inch pots now ready. Per 100, $25 00; per 1000, $200.00; 500 at 1000 rates.

ERNST ASMUS, West Hoboken, N. J.

Mention American Florist.

METEOR

AND OTHER

FORCING ROSES

Send for Price List

M. A. HUNT, - Terre Haute, Ind.

ROSES. Clothilde Soupert. ROSES.

$6.00 PER 100.

Grand, healthy plants from 3-inch pots, are in splendid condition for Spring sales. We make this price to move them quickly.

MERMET, NIPHETOS, BRIDE, GONTIER, WATTEVILLE and HOSTE, from 2-inch pots, $4.00 per hundred.

DAVID CLIFFE, Germantown, Phila., Pa.

ROSES.

Finest stock in Northwest.

Duchess of Albany, La France, Catherine Mermet, Waban, The Bride, Mme. Hoste, Niphetos, Perle, Sunset, W. F. Bennett.

C. A. SMITH FLORAL CO.

77 7th Street, South, MINNEAPOLIS, MINN.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST. . . . . .

ANCHORAGE ROSE CO., Anchorage, Ky.

WINTER FLOWERING ROSES

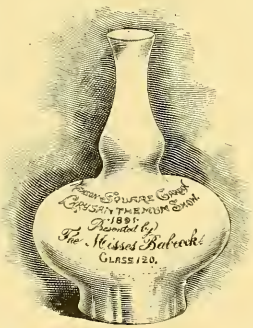
We devote more than half of our greenhouses to the production of Winter Flowering Roses, and have the finest range of greenhouses in this country for that purpose; they contain every improvement in regard to durability and labor-saving appliances; the rafters and purlins are of wrought iron, securing very light roofs and extreme durability. The water is warmed in very cold weather, before using, by the exhaust steam from the steam-pump that supplies the houses with water; liquid manure is all pumped by steam, and everything to secure the highest development of our stock, and at the least expense, has been sought for and secured, and our new range of iron rose houses, covering an acre and a half of ground, and *devoted exclusively to the production of cut roses*, are conceded by all who have examined them to be without question the finest range of greenhouses devoted to rose culture in the United States, and we believe, in consequence, we have exceptional facilities for supplying strong young healthy rose stock at the lowest possible prices. These houses are worth examination, as they are conceded to be model houses in every way. Visitors are always welcome.

PLANT THE ROSES THAT PAY, AND WHILE THEY PAY,

AND REALIZE OLD-TIME PROFITS.

NEW AND EXTRA CHOICE SORTS.

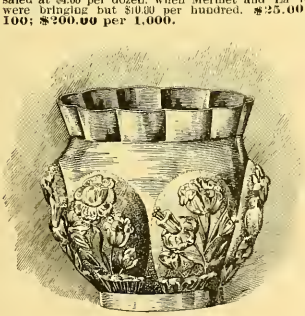
MME. CAROLINE TESTOUT.—This rose has attracted more attention than any rose sent out since the American Beauty. It was the winner at the Madison Square Garden Chrysanthemum Show of the LANGE SILVER CUP for the best new seedling of European origin not exhibited previous to 1892, and it was constantly surrounded by an admiring group throughout the show. It is a Hybrid Tea, with a decided though delicate tea fragrance. It is a very vigorous grower, throwing up heavy bottom shoots in profusion, and is also a remarkably free bloomer for so large and fine a rose, producing scarcely any blind wood. In form it is very similar to La France, and in size much larger. In color it is simply unequaled among pink roses, being of a wonderfully clear brilliant pink, of one solid tone without shading of any kind. It needs no special treatment, and for a high-class rose of easy culture, it is certainly unequaled. Large roses that can be cut in the half-blown state like Beauty, are becoming yearly more fashionable, and the popular taste seems to be growing in this direction; we have needed a good pink rose to meet this demand, and believe that Mme. Testout will fill the bill. Mr. Ernst Asmus says: "This is the best Hybrid Tea the French have ever sent out." Mr. W. W. Coles says: "I have grown many varieties of roses, but have never seen one with so many good qualities as the above. I shall be very much mistaken in my prediction if we do not find, within a few years, that there are a thousand Testouts grown for every hundred La France." Mr. Robt. Craig says: "I want to tell you that's a nice thing. The color of Testout is its great point. In that respect, it is far ahead of La France. It will keep in the cellar for three or four days, and its the color fades it keeps a pleasing shade." Growers, Retailers, and Flower Buyers are alike enthusiastic in its praise, and in our opinion this rose is destined to win a high place and prove very profitable to the grower. The past winter it wholesaled at $4.00 per dozen, when Mermet and La France were bringing but $10.00 per hundred. **$25.00 Per 100; $200.00 per 1,000.**



Silver cup awarded us 1891 for exhibit of Meteor roses for best 100 red roses of any variety.

BRIDESMAID. (Originated by Mr. Frank L. Moore).—This is the rose we have all been waiting for—a Mermet whose color is constant through all kinds of weather. Mermet has always been acknowledged as more nearly approaching perfection than any other pink rose, its one fault being its tendency to lose its color in dark weather. In the Bridesmaid we have it with this one fault corrected, and every good trait unchanged. It is identical in form, habit of growth, and freedom of bloom with its parent, and unlike Waban, it never produces malformed buds. Many of the largest and most wide-awake growers about New York intend to discard Mermet and plant Bridesmaid in its place the coming season, and we believe results will prove their wisdom, as its uniform good color causes it to bring a correspondingly uniform good price, and hence makes it much more profitable. The past winter it has brought fifty per cent. more than Mermet; when it is realized that it is fully as free of bloom, no more need be said on this point. We won First Prize two successive days at the Madison Square Garden Chrysanthemum show last fall for this variety. Mr. T. J. Slaughter, who has been a large and very successful grower of Mermet, voices the universal verdict when he says: "It gives me pleasure to give the Bridesmaid my hearty recommendation: from my experience with it this year I am convinced it will supersede the Mermet entirely, owing to its better color and greater market value. I intend to give it in future, all the room I can possibly spare. I think growers will go strong for it next year."
$10.00 Per 100; $90.00 per 1,000.

METEOR.—The finest crimson rose for winter blooming; very double, and very dark velvety crimson scarlet, its only fault being a tendency to become black during the shortest days in winter, but when well grown is not excelled; a superb variety. We grow this rose very largely, and won a silver cup at the Madison Square Garden Chrysanthemum Show, for the best fifty blooms, also both first and second prizes for the best twelve blooms. We are recognized as having the best stock about New York, and are headquarters for this variety. **$6.00 Per 100; $55.00 per 1,000**



Silver cup awarded us for Meteor roses exhibited by us at Madison Square Garden 1892 for best 25 red roses of any variety.

AMERICAN BEAUTY.—The largest rose and the most vigorous growing by far among continuously blooming roses, throwing up very strong stems from the base of the plant, every shoot terminated with a single flower, which is of the largest size. Color, deep rose. In foliage and size of flower it resembles the large Hybrid Perpetual or Hardy class, and is similar to Magna Charta or Gloire de Paris. It is as fragrant as the most fragrant of Hardy roses, which, coupled with its vigor, large size and beautiful color, long stems and continuous bloom, places it at the head of winter blooming roses. It requires skill and favorable conditions to flower it in perfection, but when successfully flowered, no other rose approaches it for beauty or profit. **$10.00 Per 100; $90.00 per 1,000.**

SOUVENIR DE WOOTTON.—A very valuable scarlet-crimson, much like Jacqueminot in size and color; an easy variety to flower, and has a delicious fragrance. Throws good stems, but frequently in clusters, in which case, by disbudding, the size of the flower is greatly increased. The best crimson winter-flowering rose at the present time "for general use," all things considered. **$6.00 Per 100; $55.00 per 1,000.**

Mme. Cusin, Perle, Mermet, Niphetos, La France and Bride,

$5.00 per 100; $45.00 per 1000.

TRADE LIST ON APPLICATION.

F. R. PIERSON CO.,

TARRYTOWN-ON-HUDSON, N. Y.

We excel in "American Beauty." We obtained First Prize two consecutive days, above all competitors, for our exhibit of "American Beauty" at the Flower Show of the N. Y. Florists' Club, held at the Lenox Lyceum in N. Y. City, in April. Also First Premium at Chrysanthemum Show, Madison Square Garden, in November, both in 1891 and 1892.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

Plant Shipments.

Of late there have been referred to us for decision several knotty problems regarding responsibility for losses of plants due to freezing in transit. As we do not possess the wisdom of Solomon, and there are always certain facts connected with such unfortunate affairs with which we cannot well become thoroughly familiar in the absence of a personal inspection of the shipment itself, we find these questions decidedly embarrassing.

As we understand it, the legal aspect of the case is that when the plants are delivered to the carrier in good condition suitably packed for transportation the responsibility of the shipper ceases and the goods are then at the risk of the consignee.

But in cases of freezing the question, "was the packing suitable?" nearly always arises, and this is frequently a hard nut to crack. A question in this line recently submitted to us was, "Is a wooden box lined with a double thickness of newspapers sufficient packing for coleus in zero weather?" Replying to this question as it is worded we would answer no. But as this shipment was made in March and as the distance traversed was about 1,000 miles, there might be room for argument regarding the statement of the question. If the packing was suited to the weather existing at the place of shipment at the time the plants were packed it would seem hardly fair to hold the shipper responsible, as he cannot be expected to know what changes there may be in the weather during transit, nor what undue exposure the package may have before final delivery. At the same time unless it can be shown that all usual precautions were taken by the shipper to insure the arrival of the plants in good condition he ought to bear the loss. It certainly is a fact that the art of packing plants is not thoroughly understood by many shippers and that the percentage of losses by damage in transit might be considerably reduced if the packing was always correct, though it is unquestionably true that losses cannot be entirely guarded against, even where packing is beyond criticism.

It would seem that a general discussion of the question of correct packing for shipment of plants at various seasons of the year might result in some little good, and to open the subject we invite an expression of opinion as to what constitutes proper packing for young coleus to be shipped from New York to Chicago the middle of March, having in mind the weather that prevailed last month.

DO YOU WANT a list of the leading cemetery superintendents? You will find such a list in our new trade directory and reference book.

Asparagus Plumosus Nanus.

CUT STRINGS: 6 to 8 feet long, 50 cents each. 10 to 15 feet long, $1.00 each.

In large or small quantities all the year round. The largest stock in the country.

W. H. ELLIOTT, Brighton, Mass.

Cape Flowers, new crop in best white quality at $1.25 the lb.; 10 lb. lots, $10 net.

Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 30-in. upwards, at 45c., 50c, 60c., 75c. and $1.00 each, according to length.

Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.

Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.

Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc. For prices consult our

Trade Catalogue, mailed free.

August Rölker & Sons,
136 & 138 W. 24th St., P. O. Station E. **New York.**

We are the People!

Who? KOFFMAN,

Where? WALDEN, Orange Co., N. Y.

What? SMILAX

25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.

When? ALL THE YEAR AROUND.

Also Adiantum Cuneatum Fronds At $1.25 per 100.

And he pays the Express.

IF YOU NEED ANY

Cape Flowers, Immortelles, Grasses, plain or fancy **Baskets, Metal Wreaths, Letters, Doves,** or any other thing in the Florists' supply line, mail us your order.

REMEMBER WE ARE THE

Leading Manufacturers of Wheat Sheaves and Baskets, and Importers of **Florists' Supplies.**

Catalogue on application. . . .

ERNEST KAUFMANN & CO.,
113 N. 4th Street. *PHILADELPHIA, PA.*

NEVADA, MO.—Easter trade grows better every year. My trade this Easter was five times that of last year.

MIDDLEBORO, MASS.—T. C. Fielding, formerly of Melrose, has purchased a stock farm here, upon which he has erected a conservatory and will add several houses in the near future.

FOR SALE.

Who? KOFFMAN.

Where? WALDEN, ORANGE CO., N. Y.

What?

Adiantum Cuneatum Plants, from 8-in. pots for propagating **$20.00** per hundred plants.

When? FOR IMMEDIATE DELIVERY.

When writing mention the AMERICAN FLORIST.

WHOLESALE FLORISTS

La Roche & Stahl

N. E. CORNER 13th & Chestnut Sts., PHILADELPHIA.

SAMUEL S. PENNOCK,

Wholesale Florist

REMOVED TO REAR OF 42 S. 16th ST., Philadelphia, Pa.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE
FLORIST,
1122 FINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

H. BAYERSDORFER & CO.,
WHOLESALE
FLORISTS' SUPPLIES ONLY,
56 N. 4th Street,
PHILADELPHIA, PA.
Our new Catalogue is now out, free upon application.

MARSCHUETZ & CO.,

FLORISTS' • SUPPLIES

23 & 25 N. 4th St., PHILADELPHIA, PA.

Send for Catalogue.

WHITE DOVES
FOR FLORISTS.
Largest and finest stock in the United States. Write for prices to
S. J. RUSSELL,
103 Van Winkle St., Jersey City, N. J.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.

	Per 100
Perle, Gontier, Niphetos	$ 4.00
Mermets, La France, Bride, Wooltons	6.00
Meteors	8.00
Jacqs	12.00
Carnations, short	1.00
" long	2.00
" " fancy	2 50
Romans, Valley, Narcissus, Tulips	3.00
Violets, Adlantum	1.00
Callas, Harrisll	10.00
Smilax	20 00

In effect till next issue of this paper.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
116 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.: Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange.
45 Lake St., CHICAGO.

M. OLSON,
Wholesale **FLORIST,**
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY & CO.
Wholesale and Commission
FLORISTS,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

A. G. PRINCE & CO.,
Wholesale and Commission
FLORISTS,
45 LAKE STREET,
In Chicago Cut Flower Exchange. CHICAGO.

WHOLESALE FLORISTS,
JOBBERS IN . . .
. . FLORISTS' SUPPLIES,
FLORISTS' VASES.
METS, BRIDES, GONTIERS, CARNATIONS, ALWAYS ON HAND.
1 Music Hall Place,
BOSTON, MASS.
HORTICULTURAL AUCTIONEERS. . .

Mention the American Florist when writing to advertisers on this page.

Wholesale Markets.

Cut Flowers.

NEW YORK, April 11.

Roses, Bon Silene, Gontiers	1.00@ 3.00
" Perles, Niphetos	2.00@ 4.00
" Mermet, Bride, Hoste	3.00@ 8.00
" Cusin, Watteville	2.00@ 6.00
" Bridesmaid	2.00@ 8.00
" La France	4.00@10.00
" Meteor	4.00@10.00
" Jacquemimot	6.00@12.00
" Beauty	10.00@50 00
" Morrison	15.00@20.00
" Hybrids	10.00@25.00
" Mme. Caroline Testout	10.00@20.00
Carnations	.75@ 1.50
Valley, hyacinths, tulips, daffodils	2.00@ 3.00
Harrisll	3.00@ 5.00
Callas	3.00@ 6.00
Violets	.50@ 1.00
Cattleyas	50.00
Mignonette	1.00@ 5.00
Adlantums	1.00
Lilac (bunch)	1.00

BOSTON, April 11.

Roses, Niphetos, Gontier	4.00@ 6.00
" Perle, Sunset	6.00@ 8.00
" Bride, Mermet	8.00@10.00
" Jacq., Luizet	12 00@25.00
" Brunner	25.00@40.00
Carnations	2.00@ 4.00
Violets	.75@ 1.00
Lilies, Harrisll and Longiflorum	8.00@12.00
" Candidums	3.00@ 5.00
Lily of the valley, tulips, daffodils	2.00@ 3 00
Narcissus Poeticus	1.00@ 2.00
Mignonette	2.00@ 4.00
Heath, per bunch	.50 to 75 cents
Primroses, per bunch	.05 to .10
Adlantum	1.00@ 1.50
Smilax	15.00@20.00
Asparagus plumosus	50.00@75.00

PHILADELPHIA, April 11.

Roses, Brunners	30.00@50.00
" Lalbgs	12.50@35 00
" Beauties	20.00@35.00
" Belles	35.00
" La France, Mermet, Bride	6.00@ 8.00
" Cusin, Watteville	4.00@ 6.00
" Jacqs	15.00
" Perle, Gontier	3.00@ 4.00
Valley	2.00@ 3.00
Carnations	1.00@ 1.50
Daffodils	2.00@ 4.00
Asdilbe	2.00
Mignonette	1 00@ 2.00
Asparagus	60.00@75.00
Smilax	20.00@25.00
Adlantum	1.00@ 1.50

CHICAGO, April 11.

Roses, Perles, Niphetos Gontier	3.00@ 4.00
" Mermet, La France, Albany	4.00@ 5.00
" Brides, Wootton, Bennett	4.00@ 5.00
" Beauties	10.00@25.00
" Jacqs	10.00@15.00
" Hybrids	15.00@20.00
Carnations (short)	.75
" (long)	1 00@ 1.50
" (fancy)	2.00
Callas, Harrisll	10.00
Romans, Valley	3.00
Violets	.75@ 1.00
Smilax	15.00@18.00

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., BOSTON, MASS.

GEO. MULLEN,
WHOLESALE FLORIST,
Florists' Supplies Always in Stock.
17 CHAPMAN PLACE,
(Off School St., near Parker House),
BOSTON, MASS.
Orders by Mail, Telegraph, Telephone or Express promptly filled.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STEET,
St. Louis, Mo.

Please mention the AMERICAN FLORIST every time you write to an advertiser.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY,
Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
The finest Roses, Violets and Carnations
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES,
LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

The Seed Trade.

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1883. Applications for membership should be addressed to Wm. Meggatt, chairman membership committee, Wethersfield Conn.

IT IS REPORTED on good foundation that a prominent Philadelphia seedsman has just closed up his onion set transactions for the past season, on which he has a clear gain of $25,000. Besides growing a very large crop he entered the market very early in the season and purchased every available crop, until he had stored the bulk of the sets in and around Philadelphia, in his warehouses, and in consequence they started to advance in price as early as October, and continued doing so all through the season. This certainly was a daring operation, but the handsome profit paid for the risk, as well as being compelled to snuff the odor of onions for an entire winter.

THE Department of Agriculture is reported as proposing to buy the government supply of seeds in the open market.

MR. S. F. LEONARD has returned from Florida much improved in health.

ONION SEED prices seem to be still on the decline.

MR. FRANK T. EMERSON is in Washington.

THE MAIL TRADE continues good.

Baltimore.

A few days of dullness have succeeded the Easter rush, and the experience of the past season is added to those gone before, in the make up of the observing florist.

While an enormous amount of plants and flowers were disposed of, yet there was no apparent shortness or stringency in any special plant or flower. Prices were good, but not excessive, and people bought freely, as the weather was generally fine. Hydrangeas were not so plentiful nor in so great demand as they have been in previous years. Genista is coming to the front more and more, and a few ericas were to be seen. Still the popular taste seeems to run to things that can be sold for low prices, as hyacinths, astilbe, Harrisii and such.

The scarcest things in town now, and the dearest, are early vegetables. It is a matter for some of our men to consider, whether a range or two of houses and frames could not be made profitable here in the vegetable business. Now, it is taken up once in a while, and it really seems as if the notion to take it up becomes epidemic in certain years, to the lowering of prices below the profitable point, but taken one year with another it may be questioned whether lettuce and cauliflower does not pay as well as violets in frames and whether rhubarb, tomatoes, etc. do not average up about as well as cut flowers. MACK.

MR. W. P. WIGHT, of Madison, N. J., was on February 23 granted a patent on his "Perfect drainage bench tile" for the Dominion of Canada.

ELM GROVE, WIS.—Mr. Herman Staeps has a climbing form of the Catherine Mermet rose for which a useful future is predicted.

FINEST QUALITY. **BULBS FOR DEALERS** LOWEST PRICES.

	Per 100.	Per 1,000
Lilium Auratum, 7x9	$ 7.50	$ 70.00
" Speciosum Album, 8x10	12.00	100.00
" " Rubrum, 9x11	8.00	75.00
" " Roseum 9x11	8.00	75.00
" Krameri	7.50	70.00
" Tigrinum Splendens, 9x11	9.00	85.00
Gladiolus, red and scarlet mixed.	1.00	7.50
" all colors	1.25	10.00

	Per 100.	Per 1,000.
Gladiolus, all colors, extra mixed	1.50	12.00
" pink shades, mixed	1.75	15.00
" all light colors (no red)	1.75	15.00
" yellow mixture	2.25	20.00
" the "Bride" (white)	1.00	8.00
Caladium, extra large bulbs	10.00	
" medium bulbs	7.00	
" small bulbs	4.00	

Address

Z. DE FOREST ELY & CO.

WHOLESALE IMPORTERS AND GROWERS

BULBS AND SEEDS

1024 MARKET ST. PHILADELPHIA, PA.

Catalogues Received.

K. J. Kuyk, Hillegom, Holland, bulbs and plants; J. Blaauw & Co., Boskoop, Holland, ornamental nursery stock; Ernst Kaufmann & Co., Philadelphia, florists' supplies; C. P. Lines & Co., New Haven, Conn., plants and nursery stock; John Saul, Washington, D. C., plants; W. P. Wight, Madison, N. J., the "Perfect drainage bench tile;" H. Yoshiike, Oakland, Cal., chrysanthemums.

SPRINGFIELD, MASS.—The annual Easter flower show of the Mielleez Horticultural Co., was held at the City Hall from March 28 to March 31. The arrangement of the plants was particularly pleasing the back ground which is so generally lacking in such affairs being supplied by numerous pines, firs and cedars, and oaks with their brown autumn foliage. The exhibition of blooming bulbs was very complete. A fine collection of cacti, agaves, etc., from R. H. Smith proved a great attraction. The Gale Floral Co., made an excellent display at their store just before Easter.

STILLWATER, MINN.—A. C. Bentley is reported burned out.

BANGOR, ME.—Carl Beers will immediately rebuild his houses, lately destroyed by fire.

CORNWALL, N. Y.—R. F. Hahn's greenhouses were partially destroyed by fire April 1; loss $4,000.

Asparagus Roots

	Per 100
COLOSSAL, two years old	$4.00
" one year old	3.00
PALMETTO, two years old	6.00
" one year old	5.00

Orders booked in rotation as received and roots forwarded soon as the weather will permit. Prices are for roots delivered f. o. b. Cash on receipt of the roots.

CROSMAN BROS., Rochester, N. Y.

COLEUS AND GERANIUMS

Cuttings and potted plants.
Wholesale and Retail. . . . .

CHAS. A. BAIRD, Manalapan, Mon. Co., N. J.

SPHAGNUM MOSS. CLEAN, DRY, FINE. 1 Bale $1.25; 3 Bales $3.50; 10 Bales $10.00.

JOHN A. SALZER SEED CO., La Crosse, Wis.

HULSEBOSCH BROS.,
BULB AND PLANT GROWERS,
OVERVEEN, near Haarlem, HOLLAND.

Prices on application for the coming season of

ROMAN HYACINTHS.	PAPER WHITE NARCISSUS.
LILY of the VALLEY.	HARRISII LILIES.
LIL. LONGIFLORUM.	TULIPS.
DUTCH HYACINTHS,	CROCUS,
SPIRAEAS,	ROSES, ETC., ETC.

☞ Spring Catalogue now ready. ADDRESS

A. HULSEBOSCH,
P. O. Box 311B. Warehouse 58 West Street,
NEW YORK CITY.

Siebrecht & Wadley,
ROSE HILL NURSERIES,

NEW ROCHELLE, N. Y.
Palms, ORCHIDS, Roses, and New Plants.
FRESH DRACAENA CANES NOW READY.

ORCHIDS.
The Finest Stock in the World.
SANDER'S, ST. ALBANS, ENGLAND.
Thirty minutes from London.
Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City

VIOLET PLANTS.
I will offer for next sixty days
Marie Louise, 75c per 100, $6 per 1,000; Swanley White, 50c per 100, $4 per 1,000; Neapolitan, 75c per 100, $6 per 1,000; Schoenbrun (single), 50c per 100, $4 per 1,000; Czar (single), 30c per 100, $2.50 per 1,000; Zonave (single), 60c per 100, $5 per 1,000.
All fine healthy plants free from any disease.
Mrs. Eugenia T. Povall, Booneville, Miss

SEA PINK. (Armeria Laucheana.)
Best of Armerias. Fine for edgings or borders. A brilliant rose color. Blooms from middle of May till November. Flourishes even on poor soil. Fragrant Hardy Pinks Strong clumps by mail or express. Send for circulars.
Thad. Hale, So. Byfield, Mass.

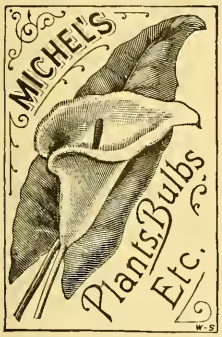
Always mention the American Florist when writing to advertisers.

LARGE CONSIGNMENT JAPAN LILY BULBS.

just arrived in splendid condition; buyers of these should note our exceptionally low prices; stock is fine. Auratum is exceedingly scarce; Lilium Lancifolium Roseum and Rubrum, $8.00 per hundred; Lancifolium Album, $12.00 per hundred; Auratum, 7 to 9 inches in circumference, $8.00 per hundred; extra selected bulbs, 10 to 11 inches in circumference, $12.00 per hundred; Lilium Candidum, $1.00 per hundred.

TRADE LIST ON APPLICATION.

F. R. PIERSON COMPANY, TARRYTOWN ON THE HUDSON, NEW YORK.



Write for wholesale list.

MICHEL PLANT AND BULB CO., ST. LOUIS, MO.

Mention American Florist.

ONE MILLION

FREESIA REFRACTA ALBA.

Extra Size–Selected bulbs–delivery August 1893. Large consumers will save money by getting quotations from the largest growers on the Pacific Coast.

Also Headquarters for CALLA BULBS in all sizes. DWARF CALLA "The Gem," L. AURATUM, home grown and Imported Native Bulbs and Tree Seeds, etc.

SHERWOOD HALL NURSERY CO.,

SAN FRANCISCO, CAL.

BENJAMIN RIMBAUD, BULB GROWER,

Quartier du Temple, Toulon, var, France.

Cable address Benrimbaud, Toulon.

The largest cultures in the South of France, of **WHITE ROMAN HYACINTHS**, Narcissus Paper White grandiflora, N. Double Roman, N. **Double Von Sion**, true pure yellow, and other Daffodils. **Lilium Candidum**, the largest bulbs. Freesias, Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A. Double Rosette the earliest, etc. Prices on application.

G. J. MOFFATT,

Manufacturer of

PAPER BAGS AND ENVELOPES

Special attention given to

Seed Bags and Catalogue Envelopes.

NEW HAVEN, CONN.

Send for Catalogue of

JAPAN BULBS, SEEDS, AND SHRUBS.

ARAUCARIAS, AUSTRALIAN Palm Seeds,

CALIFORNIA BULBS AND SEEDS to

H. H. BERGER & CO.

ESTABLISHED 1878. SAN FRANCISCO, CAL.

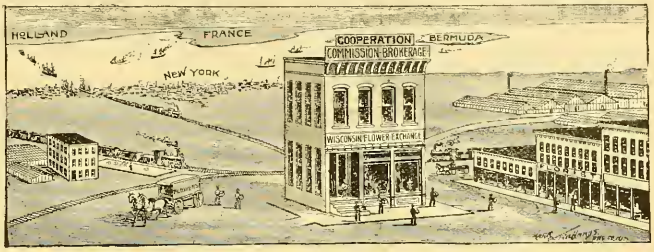
TUBEROSES.

We are headquarters.	Per 100.	Per 1,000
1st size Dwarf Pearl	$1 50	$12 00
2d size "	80	6 50
1st size Tall Pearl	1 20	10 00
Gladioli, extra large, finest sorts	1 25	12 00

H. G. FAUST & CO.,

64 and 66 N. Front St., PHILADELPHIA, PA.

WOODLAWN FARMS, 1,300 ACRES.



WE PURCHASE AND WE SELL

for our constituents. Large—Small—Rich—Poor—Far and Near are treated alike.

Growers or dealers wishing to avail themselves of the advantages offered by us in supplying **Harrisii, Freesias, Valley, Romans, Narcissus Bulbs** should write us at once.

We adjust prices on cut flowers daily according to supply, quality and demand. Whether you are a distance off or here on the spot we sell **for** you or sell **to** you **at same price.**

Correspondence solicited from those not already acquainted with us.

WISCONSIN FLOWER EXCHANGE,

131 Mason St., MILWAUKEE, WIS.

WE SELL SEEDS

TO FLORISTS AND DEALERS.

WEEBER & DON,

SEED MERCHANTS AND GROWERS,

114 Chambers St., New York.

Catalogues on Application.

BULBS FOR FORCING

SEEDS **H. A. DAACKE** BULBS

410 W. 14th St., NEW YORK.

Agent for B. J. Lomans, Haarlem, Holland, Hyacinths, Tulips and Crocuses.

Lot 1—70,000 assorted bulbs	$850.00	Lot 3—7,000 assorted bulbs	$86.00
Lot 2—14,000 assorted bulbs	170 00	Lot 4—3,500 assorted bulbs	44.00
Lot 5 1,750 assorted bulbs	$23.00		

F. O. B. Haarlem, Holland. 15 per cent. extra if from New York. List now ready.

The Catalogue of Dutch Bulbs and Flower Roots

of **J. SCHILPZAND & SONS, HILLEGOM, HOLLAND,**

is ready and can be had on application from their sole Agent,

C. RAOUX, 296 Pearl St., New York.

Indianapolis.

Easter trade was satisfactory all round. The beautiful, nay, perfect weather, Easter Sunday, sold an immense amount of blooms for wearing purposes, and it seemed that every man, woman and child had a flower about them, really a beautiful custom.

While roses and carnations were somewhat scarce, other flowers were plentiful. A very marked shortage of smilax seems to be all over the country, adiantum foliage and small plants.

Mr. D. Honacker, lately with Mrs. Rieman, has moved to Fort Wayne, Ind.

Bulb agents have been around in numbers, but the experience with bulbous flowers this season must show that they did not receive many large orders and probably the majority had to leave the city empty handed.

Regular monthly meeting of the Florists Club was held Wednesday evening. It was one of the best attended meetings of this club. Five new members were admitted.

A committee of three was appointed to revise the constitution and by-laws; also to have them printed when approved at the next meeting. A committee of three was also appointed to formulate plans for arrangements to lay before the state society at the annual meeting in July in regard to the Carnation Society's meeting next February.

An excellent paper on the propagation of roses was read by Mr. Robert McKeand, illustrating by cuttings and young plants how it is done right and how it is done wrong. A lively discussion followed, Mr. Hatfield laying great stress on the point that a very sharp knife must always be used in making cuttings, and that the sand shou'd be parted to receive them, so as to not bruise any part of the cuttings.

At the next meeting the usual spring reward will be published for the conviction of anyone found injuring flower beds and shrubs.

The prospects are for very few important improvements the coming season in greenhouse erection. However, Anthony Wiegand is building a double dwelling on his empty lot adjoining his place of business and home. Bertermann Bros. are erecting dwelling, stable, barn, and dwelling for hostler on their place east of the city. John Hartje will probably add two carnation houses. W. B.

Patents Recently Granted.

Tree or shrub baler or binder, to Henry O. Thomas, Kimball, assignor of one-half to John W. Stevenson, South Bend, Neb. Tree baler, to same as above. Lawn mower, to Fred Carlson and Charles G. Carlson, Topeka, Kans. Transplanter, to Timothy Sullivan, Janesville, Wis. Rake, to Alice J. Chamberlain, Bridgeport, Conn.

THE AMERICAN FLORIST and *Gardening* together to one address for $1.75. Send orders to the American Florist Co.

	Per 100.	Per 1,000.
COLEUS	$ .75	$6.00
AGERATUM	.50	
ALTERNANTHERA, red & yell'w	.50	4.00
HELIOTROPE, scarlet sage	.75	
SNOW CREST DAISY	1.00	

J. J. CONNELLY, BRYN MAWR, PA.

FOR SALE. 2,000 Black Walnut Saplings 3 years old. Address R. J. GREENHOW, Vincennes, Ind.

THE NEW WHITE CARNATION

GOV. RUSSELL

A SEEDLING OF 1888.

NOW READY FOR DISTRIBUTION.

Price of Rooted Cuttings: Per 1000, $80; 500 at 1000 rate; per 100, $10; 25 or less, $2 per doz.

ORDERS WILL BE FILLED STRICTLY IN ROTATION.

FOR SALE BY

N. F. McCARTHY & CO., 1 Music Hall Place, Boston, Mass.
C. J. PENNOCK, Kennett Square, Pa.
AUGUST ROLKER & SONS, New York.
and E. H. HUNT, 79 Lake Street, Chicago.

PLANTS CAN BE SEEN AT THE ESTABLISHMENTS OF ANY OF THE ABOVE NAMED.

Roses

Fine healthy stock.

Brides, Mermets, Perles, Sunsets, LaFrance, Meteor and Watteville.

From 2¼ inch pots, $4 per 100, $35 per 1,000.

CARNATIONS.

Strong healthy plants from flats,

Hinze's White, Lamborn, Fred Creighton, Grace Wilder and Portia

$2 per 100, $15 per 1,000 if ordered immediately.

B. REDFIELD, - Glenside, Pa

CARNATIONS.

ROOTED CUTTINGS.

I have decided to put the following cuttings all in at the same price: Nellie Lewis, Lizzie McGowan, Silver Spray, White Dove, Mrs. F. Mangold, and Hinze's White at $1 per 100, $9 per 1,000. Will give you Mrs. Fisher at 90c per 100; $7.50 per 1,000. Cash must accompany all orders.

E. B. LEWIS, Lockport, N. Y.

ROSES,

CARNATIONS AND VIOLETS,

STRONG PLANTS,

WRITE FOR PRICES.

Kemble Floral Co.,

OSKALOOSA, IOWA.

H. P. ROSES. 2 years, dormant, select assortment, $11.00 per 100.

CLEMATIS. Monster roots, 4 years old, $5.00 per dozen.

Hydrangea Paniculata. Strong, $12.00 per 100.

W. W. BARNARD & CO.,

6 and 8 N. Clark St. CHICAGO.

NEW BEDDING BEGONIA

THURSTONII.

Strong plants, $1.00 per dozen; $6.00 per hundred.

J. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

FARFUGIUM GRANDE.

First-class plants. Price $8.00 per 100; $1.25 per dozen, by mail. Postage prepaid.

TILTON BROTHERS, 222 Grove St., Aurora, Ill.

PANSIES. Strong, healthy plants from cold frames, $2.00 per 100.

G. NOACK, Batavia, N. Y.

Healthy rooted runners Marie Louise Violets 90c per 100, $5.00 per 1,000.

Phebe H. Baker, Media, Delaware Co., Pa.

FOR SALE.

VIOLETS.

Marie Louise Runners: healthy stock, good plants.

HENRY HESS, - - Cockeysville, Md.

CHRYSANTHEMUMS.

ROOTED CUTTINGS.

Lincoln, Ada Spaulding, Domination, L. Boehmer, Rohallion and 20 other good market sorts, $1.50 per 100; Jessica and Ivory, $2.50 per 100. Ready for delivery January 15th.

Address J. G. BURROW, FISHKILL, N. Y.

FOR SALE.

Extra fine Marie Louise Violet Clumps free from disease, 10 to 20 runners can be taken from each clump. Let me book your order now for them, price only $5.00 cash per 100 for delivery after April 1st. Be quick and speak quick.

E. KOFFMAN, Walden, Orange Co., N. Y.

When writing mention the AMERICAN FLORIST.

DO YOU WANT ANY?

	Per 100.	Per 1000.
Ivies English, one year old	$5 00	$40 00
Alternanthera, red or yellow	3 00	25 00
Echeveria Glauca, 2-2½-inch diam.	3 00	25 00
Daisies, hardy red or white	3 00	25 00
Pansies, strong plants, good strain	3 00	25 00
Coleus, rooted Golden bedder and Verschaffeltii	1 00	7 50

Sweet Pea seed, our own growing, finest varieties mixed 65c. per pound. (Cash must accompany all orders.)

JOHN RECK, Bridgeport, Conn.

FOR SALE.

10,000

Rooted Cuttings of Alternanthera

P. major and A. nana, 90c. per 100; $7.00 per 1000. Fine stock.

C. K. HOFFMEYER, Manslield Valley, Pa.

Cycas Revoluta

The Largest and Best Selected Stock of Cycas Revoluta, sprouts and roots cut off, true long leaved variety, now on hand.

For general Japanese and Australian stock, apply to

F. GONZALES & CO.,

303-312 Wayne St., SAN FRANCISCO, CAL.

Send for catalogue.

Cyclamens.

	Doz.	Hundred.
Select strains, in 3½-in pots	$1.00	$8.00
H. P. Roses, Select named kinds	1.50	10.00
Smilax, stocky, well-hardened Seedlings, per thousand, 6.00		.75

CLEMATIS.

Strong 2 and 3 year plants, own growing, leading kinds, $3.00 and $4.00 per dozen.

F. A. BALLER, BLOOMINGTON, ILL.

25,000 PANSIES The Jennings strain, extra fine plants in bud and bloom, $2.00 per 100. Medium size plants, will flower soon, $1.00 per 100; $9.00 per 1,000. Extra small plants, September sowing, 60 cts. per 100 by mail; $5.00 per 1,000; extra fine for late blooming.

E. B. JENNINGS, Pansy Grower,

Lock Box 254. SOUTHPORT, CONN.

Always mention the American Florist when writing to advertisers.

CARNATIONS ❋ AHEAD.

You want the best in the market! We have them, 16 Novelties of '93, and all the STANDARD VARIETIES! Send for our complete Price List.

GEORGE HANCOCK, Grand Haven, Mich.

Rooted Cuttings.

Carnations Hinze's White, Mrs. Fisher, Silver Spray, Jeannette, Grace Wilder, Fred Creighton, Mayflower, Century, Anna Webb, $1.50 per 100; $10 per 1000.

Orange Blossom, Portia, Hector, Florence, American Flag, $2 per 100; $15 per 1000.

Coleus, leading varieties, including the finest Yellow Coleus in cultivation. A new variety equal to Golden Bedder in color, and as good a grower as C. Verschaffeltii, $1.00 per 100; $8.00 per 1000.

Double Petunias in four finest varieties, $2.00 per 100.

Fuchsias, finest named varieties, $1 50 per 100.

Heliotrope $1.00 per 100.

Ageratum, Dwarf, White and Blue, $1.00 per 100.

500 at 1000 rates. Cash with order. 10 cents per 100 extra when shipped by mail.

JAMES HORAN, Florist,
BRIDGEPORT, CONN.

Mention American Florist.

CARNATIONS

ROOTED CUTTINGS.

Puritan, Aurora, Golden Triumph, Grace Darling, Daybreak, Pearl, White Wings, Lizzie McGowan, Louise Porsch, W. F. Dreer, J. R. Freeman,

and many other varieties; fine, healthy stock, ready January and after.

HYBRID PERPETUAL ROSES

500 Paul Neyron, strong plants....$10.00 per 100.
20 other leading varieties ..... 10.00 per 100.
$90.00 per 1,000.

☞Send for price list.

WOOD BROTHERS,
Fishkill, N. Y.

W. R. SHELMIRE,
Carnation Grower

AVONDALE, CHESTER CO., PA.

Send for price list of **Rooted Cuttings.**

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

CARNATIONS

ROOTED CUTTINGS.

Send for Price List of all the leading varieties.

WM. SWAYNE,
P. O Box 226. KENNETT SQUARE, Chester Co., Pa.

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

Orders Booked Now for My Specialties

FOR 1893.

New Jersey.—A scarlet Carnation hard to beat.....$12.00 per 100

Old Rose.—Old rose pink Carnation. .....$12.00 per 100

Nellie Bowden.—Pure bright yellow Canna.....$60.00 per 100

READY IN FEBRUARY.

Other varieties of Carnations, both old and new

JOHN McGOWAN,
• • • • • • ORANGE, N. J.

CUTTINGS

Carnations- Lizzie McGowan, Aurora, Grace Darling, Daybreak and Golden Triumph ready now.

Coleus—Twenty-two tip top bedders for 90c per 100, or $7 00 per 1,000.

Geraniums—A fine assortment at $12.50 per 1,000 or $1.50 per 100, for this, the last lot.

Canna--Dwarf French varieties at $1.50 per 100. **Smilax**—Once transplanted, for 75c per 100, or $6.00 per 1,000. Terms cash. Correspondence solicited.

ALBERT M. HERR, Lock Box 496, **Lancaster, Pa.**

SEE OUR PRICE LIST

in special carnation number of Jan. 19th, or address

EDW. SWAYNE, Carnationist,
. . . Kennett Square, Pa.

Rooted Carnation Cuttings.

WHOLESALE PRICE LIST NOW READY,

Containing a full list of best new and old sorts, including the Prize takers at MADISON SQUARE and PHILADELPHIA.

Address **H. E. CHITTY, Paterson, N. J.**

ADVERTISEMENTS

• • • SOLICITED • • •

For the annual report of the American Carnation Society.

C. J. PENNOCK, Secretary,
KENNETT SQUARE, Chester Co., Pa.

ROOTED CUTTINGS

Of the Best Old and Most Promising new varieties of

CARNATIONS.

Write for a catalogue and send list of wants for an estimate.

J. J. Styer,
CONCORDVILLE, PA.

ROOTED CUTTINGS

GOOD ONES.

Verbenas, 22 varieties.....per 1000, $8.00, per 100.		$ .50
Coleus, 12 varieties	"	1.00
Double Alyssum.....	"	.75
Chrysanthemums, 40 varieties	per doz.	.20
Fuchsias, 10 varieties	"	.20
Heliotrope, 4 varieties.....	"	.20
Cigar Plant	"	.20
Mandevilla Vine and Mexican Primrose....	"	.25

I. L. PILLSBURY, Macomb, Ill.

E. G. HILL & CO.,
Wholesale Florists,

RICHMOND, INDIANA.

GRACE BATTLES

and over 60 other varieties of

CARNATIONS

offered the Wholesale Trade.

My list embraces the best Standard and New kinds, including some of particular interest to growers of seedlings. Correspondence and personal inspection solicited. **C. J. PENNOCK,**

The Pines. Kennett Square, Chester Co., Pa.

Carnation Cuttings.

Healthy stock, well rooted, ready to ship now.

Hinze's White.....	per 100,	$1.25;	per 1000,	$10.00
Grace Wilder.....	"	1.50;	"	12.50
Portia.....	"	1.50;	"	12.50
Anna Webb.....	"	2.00;	"	15.00
Lizzie McGowan.....	"	2.00;	"	15.00
W. F. Dreer.....	"	2.50;		

THOMAS DeWITT,
(Successor to DeWitt Bros.) BRISTOL, PA.

ROOTED CUTTINGS of CARNATIONS

By the Wholesale.

Ready now. This is the best time for intending buyers to supply themselves. offer them at moderate prices. Send for Price List. Address

JOSEPH RENARD, Unionville, Chester Co., Pa.

25,000 Carnations.

ROOTED CUTTINGS AND PLANTS.

WILDER, PURITAN, McGOWAN, PORTIA, Fisher and others.

ROSES—Leading varieties. Best strains seed for Florists and Market Gardeners.

Price List Free.

C. E. ALLEN, Brattleboro, Vt.

Hartford, Conn.

The spring show of the Hartford County Horticultural Society was held in Unity Hall on March 28-29. The exhibition was a very fine one and attracted a great many visitors. Spring flowering bulbs were naturally the most prominent feature of the show, and in these John Coombs, A. N. Pierson and B. E. Beemer excelled, taking most of the premiums in these classes.

From John Coombs came also a splendid show of azaleas. A. N. Pierson's general collection filled the whole stage. The general collection of plants from W. B. May was also large and very creditable. Stephen Delbar received a diploma for a fine group of cyclamens.

H. E. Chitty, of Paterson, N. J., was on hand and showed the Hartford people what he could do in the carnation line.

Indiana Notes.

A recent visit to the establishment of Mr. H. Michel, Marion, Ind., revealed the fact that this gentlemen has a large number of excellent seedling carnations that promise to be heard from later on.

He also has among his roses a climbing Malmaison that bids fair to be a decided acquisition. The main stalks of the plant are from eight to ten feet high attached by wires to the roof of the greenhouse. The foliage is larger and darker than that of the type and the flowers are larger and of greater substance. D. W. FOWLER.

Wabash, Ind.

HERE, ARE SOME BEAUTIFUL VINES

Ampelopsis Veitchii (Japan Ivy), $1.00

Clematis, blue or white, fine, $1.00

Honeysuckle, very fragrant, white and yellow, 50c.

Wisteria, fragrant, lilac or white, $1.00

All are rapid growers and well-rooted hardy plants. Sent on receipt of price.

WILLIAMS & CO.,
Box 470 K. Rochester, N. Y.

STRING

Your Smilax and other trailing plants with

GREEN SILKALINE.

Same cord can be used with plants when decorating. For samples and prices, address

JOHN C. MEYER & CO.,
289 Devonshire Street, BOSTON, MASS.

CATALOGUE PRINTING.
ELECTROTYPING.

Done with expert ability for Florists Nurserymen, Seedsmen. Write to

J. Horace McFarland Co.,
HARRISBURG, PA.

U. S. AND FOREIGN PATENTS Trade Marks, Designs, Opinions, Searches, &c., promptly attended to. Send sketch or model for free examination as to patentability. All work strictly confidential.

GEO. H. CHANDLEE,
Atlantic Building, WASHINGTON D. C.

Mention American Florist

Always mention the AMERCAN FLORIST when writing to advertisers.

The three leading Florist Flowers:

CHRYSANTHEMUMS, CARNATIONS AND ROSES.

ALL THE NEW AND SELECTED STANDARD VARIETIES. . . .

My stock of all are as fine as can be produced at reasonable rates. Complete list of these will be mailed to all applicants in the trade.

JOHN N. MAY, Summit, N. J.

Mention American Florist.

The Snow Crest Daisy fills the bill;
Test it any way you will;
However you must grow it cold;
Then its mammoth size will hold.

Every florist should invest
In this Daisy; 'tis the best;
For design work so complete
There's really nothing quite so neat.

CUT BLOOMS, $1 PER 100, POST FREE.

Large stock fine plants all in bud and blooming, 15 for $1.00; 100 for $5.00; sample plant and bloom for 12c. Double fringed petunias, Dreer's, mixed, all colors, stock plants, 3-inch, strong, 60c. per doz.; $4 per 100; smaller from flats, $2.50 per 100; rooted cuttings, $1.10, post free. The florist double white forcing Petunia, white as the driven snow, fringed and delicately scented, valuable for cutting, design work, etc., stock plants, $1 per doz.; from flats, $5 a 100; rooted cuttings, $1.50 per 100. Double Golden Marguerites, the genuine dwarf, large flowered, stock plants, 60c. per doz., $4 per 100; smaller from flats, $2 per 100; rooted cuttings, $1.10, post free. Double Dahlia Sunflower (Helianthus multiflorus), rooted pips ready for potting, 50c. per doz., $2.50 per 100. French Cannas, Fairmount Park strain, reds in variety, dry roots ready for potting, 50c. per doz., $3 per 100; large flowered yellow, mixed, plain blotched, striped; these are extra fine showy kinds 60c. per doz. $4 per 100; a few extra fine bronze-leaved kinds, 60c. per doz. Variegated Vincas, field-grown, 3-inch, $5 per 100; small from flats, $2 per 100. Coleus, Fuchsia, Stevia, Alyssum, double and single, Gem, Feverfew and miscellaneous rooted cuttings, $1 per 100, small pits, $2 per 100. Rooted cuttings per 100 and small plants per doz. post free if desired. Safe arrival and satisfaction guaranteed or money refunded.

Address J. C. GIBSON, Woodbury, N. J.

PLANTS. FLOWERS.

Mendenhall, the Pioneer Florist of the Northwest, always to the front with the finest, healthiest, cleanest stock of Roses, Carnations, Smilax and all kinds of Bedding plants to be found. Prices low. Send for catalogue. Cut flowers at wholesale and retail. The pure air of Minnesota is good for man, beast and plants, and Minneapolis is the place, and Mendenhall Greenhouses is the name to address tor anything good in the florist line.

MENDENHALL GREENHOUSES,
MINNEAPOLIS, MINN.

Mention American Florist.

* Rooted Cuttings. *

COLEUS FOR YOU ALL!

Golden Bedder and Crimson Verschaffeltii specialties, $6.00 per 1000. Fuchsias, Storm King, Moles Worth, E. G. Hill, Phenomenal, Jupiter, Black Prince, and others, $1.00 per 100. Ageratums, dwarf, blue and white, 75c per 100. Heliotrope, 4 sorts, $1.00 per 100. Few fine Standard Dwarf, $1.00 per 100, from flats $1.50. Pansies, Hybrid, Butterfly and Trimardeau, seed bed, 40c per 100; transplanted, 60c per hundred.

CASH WITH ORDER.

J. E. FELTHOUSEN,
SCHENECTADY, N. Y.

TUBERS AND YOUNG PLANTS OF TUBEROUS BEGONIAS.

We have some fine tubers left, assorted colors per 100, $6.00, smaller and mixed ones at $4.00 and $3.00, single only. Small plants, double and single ones, ready April 1st until end of May. Sent by mail for $3.00 per 100, for best single or double mixed, or $2.50 for different strains of single mixed. Order early.

BRAUER & RICHTER, McConnellsville, O.

Mention American Florist.

GROZY CANNAS.

WE ARE HEADQUARTERS . . for all the Novelties, and in addition control EXCLUSIVELY several grand varieties which we now offer for the *first time*. We will not be undersold on any of the list.

J. C. VAUGHAN,
New York: CHICAGO.
26 Barclay Street. P. O. Box 688.

Greenhouses: Western Springs. . . .

Association "Flora"

BOSKOOP, HOLLAND.

Now on hand in New York:
CLEMATIS, 3 Years, per 100, $30.00
H. P. ROSES, for forcing, " 9.00
In the best variety, as Alfred Colomb, Anna de Diesbach, B. Rothschild, Fisher Holmes, Gen. Jack, La France, Mme. G. Luizet, Mme. Plantier, Magna Charta, Paul Neyron, P. C. de Rohan, Merville de Lyon, Perle des Blanches, Ulrich Brunner and other sorts. Azaleas, Rhododendrons, Spiræas, etc. We also have Palms, Dracenas, Araucarias and Bay Trees at our nurseries in Holland. Catalogue on application.

P. OUWERKERK, 206 Cambridge Ave.,
JERSEY CITY, N. J.

MAGNOLIAS

OBOVATA GRACILIS AND PURPUREA.

Fine, bushy plants, 3 to 8 feet, from $25.00 to $200.00 per 100.

Send for descriptive catalogue and wholesale price list free to all in the trade.

SAMUEL C. MOON,
MORRISVILLE, Bucks Co., PA.

—Prices Further Reduced.—

CAPE COD PINK POND LILY.

For price list, Plants and Cut Flowers, address the original cultivators,

CHIPMAN BROS.,
SANDWICH, (Cape Cod), MASS.

VERBENAS, $20.00 per 1,000. 2.50 per 100.

Alternantheras. $25.00 per 1,000; $3.00 per 100.
Coleus, Centauria, Alysaum, $2.50 per 100.
Pelargonium, F. Dorner, fine stock, $10.00 per 100.
Roses, fine stock leading forcing varieties.

JOSEPH HEINL, Jacksonville, Ill.

Please mention the American Florist every time you write any of the advertisers on this page.

TUBEROUS ROOTED BEGONIAS.

Best selling stock for Retail Florists. Order now and start into growth for early sales. Sell like hot cakes when in bloom. Try them if you never have. If you have, then you know it. In large quantities; choicest quality.

SINGLE, 5 separate colors, white, yellow, scarlet, pink and crimson.....$6.00 per 100; $50.00 per 1000
DOUBLE, in 5 separate colors.....$16 00 per 100. (Can be mailed for 30 cts. per 100.

F. R. PIERSON COMPANY, TARRYTOWN ON THE HUDSON, NEW YORK.

C. C. Abel & Company

P. O. Box 920, **NEW YORK,**

FLORIST'S, NURSERYMEN'S AND SEEDSMEN'S AGENTS,

— For the following —

WELL KNOWN AND RELIABLE HOUSES,

For whom we solicit your orders:

C. G. VAN TUBERGEN, Jr., Florist and Seedsman, Haarlem, Holland. Choice Dutch Bulbs, Novelties, etc.

PIERRE SEBIRE & SONS, Nurserymen, Ussy, France. Roses, Evergreens, Fruit and Forest stocks.

ERNST RIEMSCHNEIDER, Florist and Seedsman, Altona, Germany. Berlin Lily of the Valley a specialty.

ERNEST RIEMSCHNEIDER, Florist and Seedsman, Altona, Germany. Choice selections of German Flower Seeds. Also of Palms, Grass and Garden Seeds. **Best Sugar Beet Seeds a Specialty.**

Catalogues (mention which) free on application when received for distribution.
All orders for these houses should be plainly written and addressed to us.

"CHRYS-COLA"

ROOTED CUTTINGS

Coleus,
Chrysanthemums.

Send for price list.

Golden Bedder Coleus are all ordered to April 30.

S. B. FIELD, Roselle, N. J.

Don't Wait

till the minute you want them, but place your order for

Coleus

NOW. We are sold two weeks ahead of delivery. All the best kinds, including "Sunrise," the new yellow.

Send for list.

ALEX. McBRIDE, Alplaus, N. Y.

Marie Louise Violets.

The Anchorage Rose Co. offers 50,000 Marie Louise Violets, well established in 2½ inch pots, absolutely free from disease, $25.00 per 1,000. First come first served.

Anchorage Rose Co.,
ANCHORAGE, KY.

SEND FOR A COPY
— OF OUR —
TRADE DIRECTORY
AMERICAN FLORIST CO., CHICAGO

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

CHRYSANTHEMUMS

GOOD STRONG, HEALTHY FROM 2½ AND 3-INCH POTS.

4 cents—not less than 5 plants.
Mrs. J. N. Gerard.
L. Canning.
V. H. Hallock.
L. B. Bird.
W. W. Coles.
Violet Rose.
Rohallion.
Mrs. Langtry.
Louis Boehmer.
Gloriosum.

5 cents—not less than 5 plants.
Ada Spaulding.
Jessica.
W. H. Lincoln.
H. E. Widener.
Ivory.
E. D. Smith.
Cullingfordi.
Waban.

6 cents—not less than 5 plants.
A. J. Drexel.
C. D. Avery.
J. G. Whilldin.
Col. H. M. Bois.
Governor Fifer.
Joseph H. White.
Mrs. W. S. Kimball.
W. A. Manda.

8 cents—not less than 5 plants.
Mrs. Robt. Craig.
Mrs. L. C. Madeira.
Mrs. E. D. Adams.
G. W. Childs.
E. Hatch.
Hicks Arnold.
Roslyn.
Harry May.
E. Hiteroth, O. P. Basset, **10 cents.**

S. PICKELMAN,

352 William St., BUFFALO, N. Y.

Plants at Auction

Regular Spring Sales begin on Wednesday, April 19, at 10 A. M. at 84-86-88 Hawley Street. First Sale: Imported Hardy Stock. Succeeding sales every Wednesday and Saturday will comprise Bedding Plants in great variety, from the largest and best growers for the Boston market. **EDWARD HATCH,** Auctioneer.

9 Congress St. BOSTON, MASS.

Ice Boxes

FOR FLORISTS.

All sizes and styles. Correspondence solicited.

KANKAKEE MFG. CO., Kankakee, Ill.
CHICAGO OFFICE: 266-268 Wabash Ave.

CUTS!

Wood Engraving,
Zinc Etching,
Half-Tone,
Wax Engraving, Photo-Engraving,
Designing.

MANZ & CO.,
183 Monroe Street, CHICAGO. ENGRAVERS.

DO YOU WANT

BEDDING PLANTS?

Geraniums,
Coleus,
Achyranthus,
Asters,
Thyme,
Petunias,
Vines,
Alternanthera,
Dianthus,
Feverfew,
Alyssum,
Heliotrope,
Stocks,
Lobelia,
Daisies,
Candytuft,
Mignonette,
Begonias,
Verbenas,
Etc., Etc., Etc.

If so, send for prices to the

ELGIN ROSE CO.,
TELEPHONE 8.
519 Chicago Street, - - ELGIN, ILL.

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

Worcester, Mass.

The Easter trade was immense. The weather was mild and fair, and flowers were plentiful and prices a little above the average. Everybody had all the work they could jump at and were at it late into Saturday night. Nearly all the churches had more or less of a decoration and though a good many lilies came up from Bermuda, everybody sold out all they had.

Harrisii and longiflorum sold for $3.00 a dozen and candidums at $1.50. The best Jacqs brought $3.00 and Mermets and Brides $2.50. Violets were rather scarce and sold for $1 a hundred. Bulbous stuff, valley and carnations were plentiful and sold for regular prices.

The bulk of the trade was in cut flowers and potted lilies, and a great many pans of tulips, hyacinths and narcissus were disposed of.

Easter trade is increasing steadily every year and almost atones for the dull season during Lent. SEEDLING.

The Rose Number.

EDITOR AMERICAN FLORIST:—Thanks for your special rose number, which I consider the best you have ever published. The brief history of the varieties, their accurate descriptions, together with the cultural instructions and hints as to its enemies and the causes of failure, are just what many of your readers want to know. The editor, artist and printer have worked in harmony together and given us a paper that does credit to our country and our people.

Floral Park, N. Y. C. L. ALLEN.

BRADFORD PA.—Easter sales were very much larger than last year, with an especially noticeable call for violets and blooming plants. The supply was larger and of better quality than last year, as we had several bright days just before Easter. But an unpleasant feature of the Easter trade here was the action of one of the florists in cutting retail prices down below wholesale rates. He retailed Brides and Mermets at $1 a dozen, and other flowers in proportion.

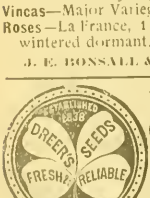
PATERSON, N. J.—Easter business considerably in excess of any previous year. Harrisii lilies sold well, and were as a rule fine. Everything in the way of cut flowers cleaned up by night, and everybody well satisfied with general results.

TO MAKE ROOM,

WE OFFER FOR A SHORT TIME. Per 100.

Begonia—Thurstonii.....$6 00
" Metallica and Lucille..... 3 00
Bouvardia—(Root cut, from flats.) Elegans and Davidsonii..... 1 50
Carnations—(Well established plants from flats.) Mrs. Fawcett, L. McGowan, Grace Wilder and Garfield.. 2 00
Eucharis—Strong bulbs.....10 00
English Ivies—2-inch..... 2 00
" " 1 year, 2 to 3 feet.....10 00
Vincas—Major Variegata, 2-inch..... 3 00
Roses—La France, 1 year pot grown, wintered dormant.....10 00

J. E. BONSALL & SON, Salem, Ohio.



TRY DREER'S GARDEN SEEDS, Plants, Bulbs & Requisites. They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.

HENRY A. DREER, Philadelphia, Pa.

WHERE? OH WHERE?

Can I get GOOD Hardy Ferns this spring and for Memorial Day?

Well, we know of but one place and that is at

H. E. HARTFORD'S,

Also Bouquet Green, Laurel Festooning, Decorative Goods, etc., etc.

18 CHAPMAN PLACE, BOSTON.

CHRYSANTHEMUMS.

NOVELTIES AND STANDARD VARIETIES.

Lowest price on application.

NATHAN SMITH & SON,

167 W. Maumee Street, ADRIAN, MICH.

100,000 VERBENAS. THE CHOICEST VARIETIES IN CULTIVATION.

Fine pot plants, $2.50 per 100; $20 00 per 1000 Rooted Cuttings, $1 00 per 100; $8 00 per 1000.

NO RUST OR MILDEW.

Packed light, and satisfaction guaranteed. Send for circular. . . .

Our sales reached nearly 250,000 last year, and we can assure our customers that our plants are fully equal, and assortment of varieties surpass those of last year.

J. L. DILLON, Bloomsburg, Pa.

ROSES AND CARNATIONS. The Largest and Finest Stock in the Northwest ever offered at the following prices:

ROSES—Perles, Hoste, Sunset, La France, Mermet, Bride, C. Soupert, Niphetos, from 2½-inch pots, $4 00 per 100
Mme. Watteville, Albany, Pierre Guillot, Meteor, from 2½-inch pots ..... 5.00 per 100
American Beauty, from 2½-inch pots..... 7 00 per 100
CARNATIONS—Silver Spray, Lizzie McGowan, Hinze's White, Hector, Portia, Garfield, Grace Wilder, Fred. Creighton, Mrs. E. G. Hill, from 2-inch pots..... 3.00 per 100
Rooted Cuttings of all varieties offered..... 2.00 per 100

Cut Flowers, Roses, Carnations Lilium Harrisii and Smilax at lowest market prices. Telegraph orders promptly attended to. CHRIST HANSEN, Wholesale Florist, ST. PAUL, MINN.

GOODYEAR RUBBER CO.

ALL KINDS RUBBER GOODS.

We make a SPECIALTY in GARDEN HOSE, in both Rubber and Cotton.

A GREAT VARIETY OF HOSE REELS, SPRAY PIPES, SPRINKLERS, ETC.

141 Lake Street, CHICAGO.

Mention American Florist.

Rooted Cuttings of Evergreens, Hardy Flowering Shrubs and Hardy Perennials (Achillea, iberis, etc.) raised on contract for spring delivery. SEND LIST OF WANTS.

. . . ISAAC C. ROGERS, MOORESTOWN, N. J.

ROOTED CUTTINGS.

Alternantheria, Versicolor, Tricolor and Aurea Nana	per 100	.50
Alternantheras Paronychioides	"	.75
Coleus, best old and new	"	$1.00
Fuchsia, leading varieties	"	1.50
Heliotrope, leading varieties	"	1.50
Mexican Primrose	"	1.50
Parlor Ivy, variegated	"	1.50

PLANTS.

Antherieum Picturatum	per doz.	$1.00
Fuchsia, Trailing Queen	"	.75
Begonia assorted	per 100	4.00
Coleus, assorted	"	3.00
Chrysanthemums, leading kinds, our selection	"	3.00
Heliotrope, assorted	"	3.00
Petunias, double, assorted	"	4.00
Anthemus Tinctoria, a good bloomer	"	4.00
Anthemus Coronaria	"	4.00
Solanum Jasminoides Grandiflora	"	4.00
" Jasminoides var	"	5.00
Var. Parlor Ivy	"	4.00
Fuchsia, best varieties	"	3.00
" Storm King and Phenomenal	"	4.00
Echeveria Glauca	"	4.00
" Extensa Globosa, for centers, plants six inches across	each.	.25

Price List on Application.

ROBT. S. BROWN & SONS, (x 89, Kansas City, Mo.

SPLENDID STOCK.

		Per 100
Alternantheras P. Major, aurea nana 2-in. pots,		$2.00
Begonias, flowering sorts	2½-in. "	4.00
Coleus, in 12 splendid sorts	2-in. "	2.50
Cyclamen, in bud or bloom	3½-in. "	8.00
Chrysanthemums, 40 splendid sorts	2-in. "	3.00
Dahlias, large roots, 36 varieties	"	5.00
Geraniums, double and single sorts	2½-in. "	4.00
" silver leaved sorts	2½-in. "	4.00
" ivy leaved sorts, including Jeanne d'Arc	2½-in. "	4.00

HANS NIELSON, St. Joseph, Mo.

HEADQUARTERS FOR WATER-LILIES

SEED TUBERS AND PLANTS.

Place your orders early if you wish to secure good stock of charming yellow Water Lily, N. Chromatella plants. 1st size, $1.00 each, $10 doz.; 2d size, 75c each, $8.00 per doz. Also, the new French and other new hardy varieties. Send for price list.

Wm. Tricker, DONGAN HILLS, NEW YORK.

Mention American Florist.

LITTLE'S ANTIPEST.

— A —

Valuable Discovery of the 19th Century.

SILVER MEDAL AWARDED

— BY THE —

CALIFORNIA STATE FAIR OF 1890.

This preparation Is a sure destroyer of the **Scale, Wooly Aphis** and **Insect Pests** of any and all descriptions. It may be as freely used in the conservatory, garden and greenhouse as in the orchard or vineyard. It is non-poisonous and harmless to vegetation when diluted and used according to directions. It mixes instantly with cold water in any proportion. It is **Safe, Sure** and **Cheap.** No fruit grower or florist should be without it.

Send for Circulars and Price List.

R. W. CARMAN, General Agent,
291 AMITY STREET,
FLUSHING, Queens, Co., N. Y.

Mention American Florist.

W. C. KRICK'S

PATENT

Florists' Letters, Etc.

Highest Award wherever exhibited.

These Letters are made of the best immortelles, wired on wood or metal frames having holes drilled in them to insert toothpicks, by which to fasten them in the design. All infringements prosecuted.

2-inch Letters, $3 00 per 100. Postage, 15c. per 100.

Before purchasing send for free sample and Catalogue and compare with any other letter in the market.

W. C. KRICK, 1287 Broadway, BROOKLYN, N. Y.

Agents:—J. C. VAUGHAN, Chicago, Ill.; H. BAYERSDORFER & Co., Phila., Pa.; N. STEFFENS, N. Y.; AUG. ROLKER & SONS, N. Y.; ED. S. SCHMID, Washington, D. C.; JAMES VICK'S SONS, Rochester N. Y.; T. W. WOOD & SONS, Richmond, Va.; J. A. SIMMERS, Toronto, Ont.

Mention American Florist.

BOSTON FLORIST LETTER CO.,

13 Green Street, BOSTON, MASS.
Address all correspondence to 1 Music Hall Place.

Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1½-inch and 2-inch, $2 00 per 100. Patent fastener with each letter.

With orders for 500 letters we give away a nicely stained and varnished box. See cut in next week's American Florist.

Our letter is handled by all the wholesalers in Boston.

AGENTS: Marschuetz & Co., 25 N. 4th St., Philadelphia, Pa.; A. Rolker & sons, New York; F. E. McAllister, 22 Dey St., N. Y.; E. Kaufman, Philadelphia; H. Bayersdorfer & Co., Philadelphia, Pa.; A. D. Perry & Co., 33 Warren St., Syracuse, N. Y.; A. C. Kendal, 115 Ontario St., Cleveland, O.; E. H. Hunt, 79 Lake St., Chicago; Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.; H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O.; T. W. Wood & Sons, 6th and Marshall Sts., Richmond, Va.; Jas Vick's Sons, Rochester, N. Y.; Dan'l B. Long, Buffalo, N. Y.; C. A. Kuehn, St. Louis.

J. A. Simmers, Toronto, Ont., Agt. for Canada.

J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS •

Greenhouse Material,

LOUISVILLE, KY.

STOTT'S KILLMRIGHT

STOTT'S SYSTEM OF SPRAYING SAVES KILLS, INSECTS AND MILDEW

PLANTS-FLOWERS-FRUITS.

TOTT'S PRAYER

STOTT'S DISTRIRUTER CHARGED WITH KILLMRIGHT, CONNECTED WITH FAUCET READY FOR USE WORKS EQUALLY WELL WITH A GARDEN ENGINE.

END FOR CIRCULAR AND TESTIMONIALS.

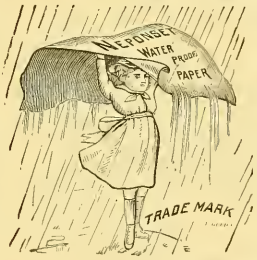
STOTT'S SYRINGE

CELL "A" CONTAINS THE KILLMRIGHT

STOTT GARDEN IMPLEMENT COMPANY
136 LIBERTY ST. NEW YORK.

NEPONSET • FLOWER • POTS

of Waterproof Paper, light, durable, unbreakable and cheap.



Tomato Growers have used them with success and proved their appreciation by repeated orders.

Cabbage Growers have tried them and duplicated their orders.

Market Growers of Verbenas, Alyssum, Coleus and other plants, which do not shun moisture, have used them extensively in repeated seasons.

Recommended for light and safe packing of tender and valuable plants. for the marketing of Ferns, Dutch Bulbs, Lily of the valley and the like.

Cost about 40 per cent less than earthen pots, and weight considerably lighter, thus saving in first cost and freight.

For Price List and further particulars address

Wholesale Agents:

AUGUST ROLKER & SONS, Station E, New York.
R. & J. FARQUHAR, - - - - Boston, Mass.

Who furnish samples, by mail, postpaid, on receipt of

	10 cts.	11 cts.	14 cts.	17 cts.	22 cts.	40 cts.	60 cts.
For 1 dozen	2¼-in.	2½-in.	3-in.	3½-in.	4-in.	5-in.	6-inch pots.

F. W. BIRD & SONS, Sole Manufacturers, EAST WALPOLE, MASS.

SMITH & WEBSTER,

MAKERS OF

GREENHOUSE PIPE

FOR HOT WATER AND STEAM,

193 Lake Street, - CHICAGO, ILL.

Mention American Florist.

STANDARD HOSE MENDER.

The only Mender using ordinary galvanized wire No. 14, instead of expensive bands. Any person can handle it with perfect ease. Thousands in use and all testify to its Wonderful Merits.

Sample Box, by Mail, 50 cts.

E. HIPPARD, Youngstown, Ohio.

GLASS. ROCK BOTTOM PRICES. Send for Estimate. Satisfaction Guaranteed.

REED GLASS CO.,
65 Warren St., and 46, 48 & 50 College Place,
New York City.

Mention the American Florist when writing to advertisers on this page.

PLANT BED CLOTH.

CHEAP SUBSTITUTE FOR GLASS on Hot beds, Cold Frames, etc. Three grades.

Light, Medium, Heavy.

Used by **Florists, Gardeners,** etc., invaluable for **Tobacco Growers.** Protects from frost. Promotes, hardy, vigorous growth and keeps beds warm; will not shrink or mildew. For sale by the leading Dry Goods houses, Seedsmen, Florists, etc. Well known and extensively used. For circulars and samples apply

NATIONAL WATERPROOF FIBRE CO,
50 South Street, - - NEW YORK.

Agents Wanted.

Mention American Florist.

FLORAL DESIGNS

The Cut Flower Worker's friend. Fine book of 160 pages. Send $3.50 for it, to
J. HORACE McFARLAND, Harrisburg, Pa.

Southern Violets.

ED. AM. FLORIST:—I want to correct a mistaken idea your St. Louis correspondent has about southern grown violets. They are not grown in the open air with no protection as stated by him. We have regularly constructed cold-frames, though instead of glass we use plant bed cloth, which is cheaper and answers our purpose just as well.

We do not consider open air grown violets of any use and do not ship them, as the stems are too short and the blooms are very inferior in many respects. But I learn that 50 or 60 miles south of us violets are grown in great profusion without covers, though I am sure from what I have seen that any careful discerning wholesale or retail florist can readily tell this kind of stuff and it should be with violets as with every other marketable product, they should sell on their merit and good qualities.

I do not think any animosity should be entertained by our northern brethren against southern growers, and if we can grow violets cheaper we should have an equal showing. We of the south do not condemn the productions of the north simply because they come in competition with ours but we let quality, cheapness, merit and other good points be the deciding factors. E. T. P.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

Clear Cypress, from bottom gutter up is my specialty.

Lyman Felheim, ERIE, PA.

Mention American Florist.

THE BEST POTS.
THE CHEAPEST.
THE LOWEST FREIGHT RATES.
THE BEST OF PACKING.
THE LARGEST POTTERY IN THE STATE FOR MAKING STANDARD FLOWER POTS.

PRICE LIST OF POTS.

	Per 1000		Per 100
2 inch	$3.25	6 inch	$2.20
2½ "	3.50	7 "	3.50
2¾ "	4.00	8 "	5.00
3 "	5.00	9 "	7.50
3½ "	7.25	10 "	10.00
4 "	9.00	11 "	15.00
5 "	13.80	12 "	20.00

Terms: Cash, free on board cars here. Address

HILFINGER BROS., Potters
FORT EDWARD, N. Y.

THE PERFECT DRAINAGE

BENCH TILE

For circulars, etc., address

W. P. Wight, Upland Green Houses,
Send your business card. MADISON, N. J.

Mention American Florist.

THE "LOCKLAND" Sash Bars

ARE ALWAYS SATISFACTORY.

This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.

GUTTER MATERIAL, RIDGES, SASH, ETC.

The finest CLEAR CYPRESS used.

Write for circulars and estimates.

LOCKLAND LUMBER CO.
Lockland, O.

Mention American Florist.

"Standard" Flower Pots.

As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address

The Whilldin Pottery Company,

BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.

Every u er of Flower Pots shou'd correspond with us before purchasing elsewhere, our facilities are unequalled.

A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.

We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers that our make are the best in the market. Bear in mind that freight rates are very low from this point and we claim that our way of packing saves you freight charges Send for circulars, or we will send you figures on any quantity you want.

SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY,
Manufacturing the
ELVERSON, SHERWOOD & BARKER
STANDARD FLOWER POTS.

Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bud Pots, etc.

ADDRESS **PITTSBURGH CLAY MF'G CO., New Brighton, Pa**

H. M. HOOKER COMPANY,

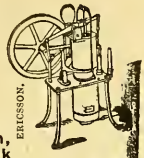
57 and 59 W. Randolph Street, CHICAGO,

NATURAL GAS MADE GLASS

FOR GREENHOUSES.

Write for latest prices.

WATER
For Your GREEN HOUSE, ROSE HOUSE, NURSERY,
Conservatory, Lawn, House, Garden, Stock or any other purpose.
Send for Illustrated Catalogue OF THE
DE LAMATER-RIDER AND DE LAMATER-ERICSSON PUMPING ENGINE.

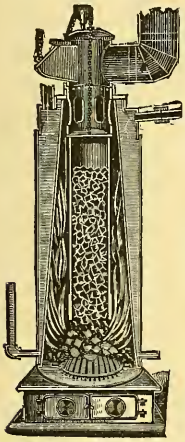

ERICSSON.

HOT-AIR PUMPING ENGINE.

Their operation is so simple and safe that a child can run them. They will pump water from shallow streams or any kind of well. They can be arranged for any kind of fuel. Capacity 1,500 to 30,000 gallons of water a day, according to size.

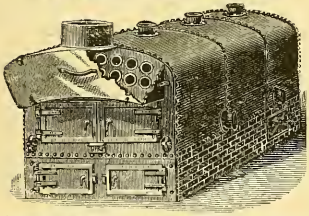
RIDER.

The De Lamater Iron Works,
24-26 CORTLANDT ST.,
NEW YORK, N. Y.



THE WILKS HEATER,
FOR HEATING
GREENHOUSES, STORES, DWELLINGS, ETC.
Manufactured THE S. WILKS MF'G CO. 123 S. Clinton St., CHICAGO, ILL.
☞ SEND FOR CATALOGUE.

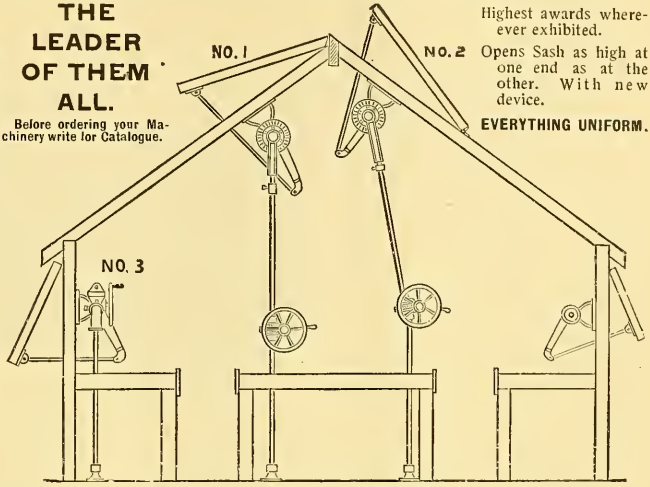
KROESCHELL BROS.
IMPROVED
Greenhouse × Boiler,
41 to 55 Erie St., CHICAGO.



Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around (front, sides and back). Write for information

YOU CAN SAVE MONEY BY PURCHASING, AND GLASS BY USING
HAMILTON'S PATENT SASH LIFTER.
"It works like a charm." So say those who use it. Send us 50 cents for one sample and you will say so too.
BAY STATE HARDWARE CO.
272 Freeport Street, BOSTON, MASS.

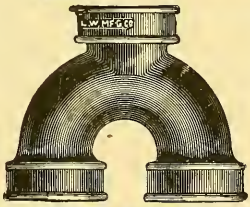
STANDARD VENTILATING MACHINERY,
THE LEADER OF THEM ALL.
Before ordering your Machinery write for Catalogue.



Highest awards wherever exhibited.
Opens Sash as high at one end as at the other. With new device.
EVERYTHING UNIFORM.

E. HIPPARD, YOUNGSTOWN, OHIO.

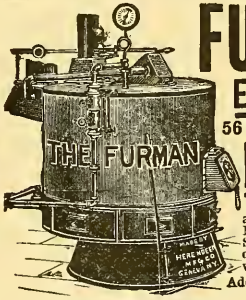
Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Green houses throughout the West, to any of which we refer as to its excellent quality.
Pipe can be easily put together by any one, very little instruction being needed.

GET THE BEST!
Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.
Mention American Florist.

L. WOLFF MFG. CO., 93 to 117 W. Lake Street, CHICAGO.
WRITE FOR ILLUSTRATED CIRCULAR.



FURMAN BOILERS
Economical — Substantial — Safe.
56 STYLES AND SIZES—BURNS HARD OR SOFT COAL.
Modern Hot-Water Heating
These Boilers have a high reputation for Staunchness, Durability and Safety, and are GREAT COAL SAVERS. Minimum Friction and Maximum Velocity only obtained by VERTICAL WATER CIRCULATION. Send for new 150-page book giving full particulars and a great deal of valuable information on modern Heating and Ventilation, with plans and tables for correct hot-water work. Mailed free.
Address HERENDEEN MFG. CO., 26 Vine Street, GENEVA, N. Y.

D. H. ROBERTS,
159 & 161 S. Fifth Ave., NEW YORK,
NATURAL GAS MADE GLASS
for ROSE HOUSES, CONSERVATORIES, Etc., Etc.
Our Glass received the Highest Award at the Boston Convention of the S. A. F.

Index to Advertisers.

Adv. Rates, etc 964
Abel C C & Co.....971
Allan C E.....969
Anchorage Rose Co 962 971
Asmus Ernst.....962
Baird Chas A.....966
Baker Phebe A 968
Baller F A 968
Barnard W W & Co.....968
Bay State Hdw Co.....975
Bayersdorfer H & Co.....964
Berger H H & Co.....967
Bird F W & Son 972
Bonsall Jos E & Son 968 972
Boston Letter Co. 975
Brauer & Richter 970
Brown R S & Son 962
Burns & Raynor.....965
Borrow J G.....968
Burton John.....964
Carman R W 973
Carmody J D 966
Chandlee Geo F 970
Chipman Bros 970
Chitty H E.....969
Cliffe David.....962
Coles W W 961
Connelly John J 968
Cook John.....964
Corbrey T J & Co.....965
Crosman Bros 966
Danckc H A.....964
De Lamater Iron Wks.975
De Witt Thomas.....969
Dillon J L.....972
Breer H A.....972
Elgin Rose Co.....971
Elliott W H.....964
Ellison Wm.....965
Ely & De Forest & Co 966
Faust H G & Co 967
Felheim Lyman.....974
Felthousen J E.....970
Field S B.....971
Gibson J C.....970
Gonzalez & Co 968
Goodyear Rubber Co.972
Greenhow R J.....968
Hall Ass'n 976
Hale Thaddeus.....966
Hancock Geo 969
Haesen Christ 972
Hart James.....965
Hart Michael A 965
Hartford H E 972
Hatch Edw.....971
Heinl Jos.....971
Heiss J B.....961
Henderson John Co ..961
Herendeen Mfg Co ..975
Herr Albert M.....969
Hess Henry.....968
Hews A H & Co.....974
Hillinger Bros.....974
Hill E G & Co. 969
Hippard E 975 976
Hitchings & Co.....976
Hoffmeyer C K 968
Hooker H M Co.....974
Horan Edw C 968
Horan James.....962
Halseboscb Bros.....966
Hunt E H.....973
Hunt M A 962
Hunter & Purdy 969
Jenoings E B 968
Kankakee Mfg Co.....975
Kaufmann Ernst & Co.964
Kemble Floral Co 968
Kennicott Bros.....965
Koffman F 964 968
Krick W C.....973
Kroeschell Bros.....975
Koehn C A.....964
La Roche & Stahl.....964
Lewis E B 968
Lockland Lumber Co..974
Lombard R T 969
Long Dan'l B.....965
McBride Alex.....971
McCarthy N F & Co.....962
McFarland J H.....975
McFarland J H Co.....970
Mcgowne John.....969
Mantz J & Co.....971
Marschuetz & Co.....964
May John N 970
Mendenhall R J.....970
Meyer John C & Co 970
Michel Plant & Bulb Co 967
Millang Bros.....965
Moffatt G I.....967
Mohinger Jno Co.....976
Moon Samuel C.....970
Moon Wm H Co 964
Moore Frank L.....962
Mullen Geo.....965
Nanz & Neuner.....962
National Fibre Co 975
Nelson Hans 972
Niles Centre Floral Co.965
Noack G 968
Olson M 965
Ouwerkerk P.....970
Peck & Sutherland.....965
Pennock C J.....969
Pennock C J, Sec'y.....969
Pennock Sam'l S.....964
Pickelmann S 971
Pierson F R Co.965 967 971
Pillsbury I L.....969
Pittsburg Clay Mfg Co.974
Povall Mrs E T 965
Prince A F & Co.....965
Randall A L.....965
Rauss C.....967
Reck John 968
Redfield B 966
Reed Glass Co 975
Reed & Keller.....971
Renard Joseph.....969
Rimbaud Benj.....967
Roberts D H.....975
Roehrs Theo.....965
Rogers Nurseries.....972
Rolker A & Sons 964
Russell Governor 968
Russell S J.....964
Salzer Seed Co.....973
Sander & Co.....966
Schulz Jacob.....964
Shelmire W R 967
Sheridan W F.....965
Sherwood Hall Nur Co.967
Siebrecht & Wadley.....968
Siplle Doppfel & Co.....974
Situations, wants.....961
Smith C A Floral Co.....962
Smith Nathan & Son.....972
Smith & Webster.....975
Stott Garden Imp Co .973
Struck J N & Bro 973
Styer J J 969
Sunderbruch H L 965
Swayne Edw.....969
Swayne Wm.....969
Tesson R F 964
Tilton Bros.....968
Tricker Wm.....972
Vaughan J C.....970
Weathereds Sons T W 966
Weeber & Don.....967
Welch Bros 965
Whilldin Pot Co.....974
Wight W P.....974
Wilks S Mfg Co.....975
Williams A Co.....970
Winter N D 964
Wisconsin Flower Ex.967
Wolff L Mfg Co.....975
Wood Bros.....967

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

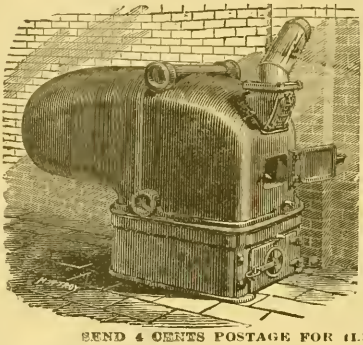
CYPRESS GREEN HOUSE MATERIAL

CLEAR CYPRESS SASH BARS

HOT BED AND VENTILATING SASH

JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

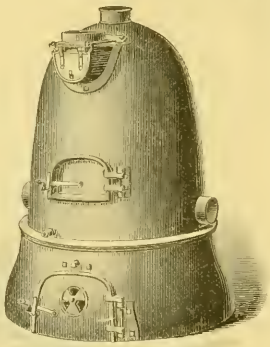
GREENHOUSE HEATING AND VENTILATING
Horticultural Architecture and Building.



HITCHINGS & CO.
Established 1844.
233 Mercer St., New York.
FIVE PATTERNS OF BOILERS.
NINTEEN SIZES.
Perfect Sash Raising Apparatus.
Rosehouses, Greenhouses, Etc, of Iron Frame Construction, Erected complete, or the Structural Iron Work shipped ready for erection.
Iron Frame Benches with the "Perfec. Drainage Bench Tile" or Slate Top
SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUE.

WEATHERED'S DOUBLE DOME BOILERS

Are the Very Best.
OUR
Patent Rocking
AND
Shaking
Grates
ARE
ABSOLUTELY PERFECT.
Being in the smallest sections are the least costly to keep in repair.
Send 3 Cents Postage for CATALOGUE and please mention this paper.



Proven by 40 years USE
Effective and Durable.
PATENT
Sash Raising
Apparatus.
ROSE HOUSES, GREEN HOUSES, ETC.
of Iron Frame Construction, erected complete, or the Structural Iron Work shipped ready for erection.
Iron Frame Benches with Drainage Bench, Tile or Slate.
THOMAS W. WEATHERED'S SONS, (Incorporated) 244 CANAL ST., N. Y.

EVERY BODY TELLS ME,
AND NOW I TELL YOU
THE "NEW DEPARTURE"
Is the BEST and the Cheapest
Ventilating Appliance
That has ever been Introduced for FLORISTS' USE.

Goodrich 15 Dec 93
This man Says about it.

MACOMB, ILL., Feb. 21, 1893.
MR. J. D. CARMODY, *Dear Sir:*
The ventilating apparatus received of you we finished putting up yesterday, and it works fine—I don't know how any one could ask more—as it raises the windows in a 100-foot house easily and evenly. If I had known a ventilating apparatus could be bought for so little money I would have ordered one for the house I built last year; and if I build another next year you can count on an order.
Very respectfully, I. L. PILLSBURY.

J. D. CARMODY, - - Evansville, Indiana.

When writing to any of the advertisers on this page please mention the American Florist.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.
JOHN G. ESLER, See'y F. H. A., Saddle River, N. J.

THE AMERICAN FLORIST

A WEEKLY JOURNAL FOR THE TRADE

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, APRIL 20, 1893.** **No. 255**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company.
Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,

322 Dearborn Street, CHICAGO.
Eastern Office: 67 Bromfield St., Boston.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis, Mo., August 9 to 12, 1893.

CONTENTS.

Roses—True colors of various roses 977
—Rose Her Majesty 978
—Number of blooms cut 978
A pansy blight (with 5 figures) 978
Succession of crops 978
Miscellaneous seasonable hints 980
Carnations—Seasonable hints 980
—Carnation rust 980
An asparagus house (with illus) 981
World's Fair impressions 981
Victoria regia (with illus) 982
New York 982
Boston 982
Philadelphia 982
Chicago 983
Washington 984
St. Louis 985
Baltimore 985
News notes 985
How to grow cut flowers 988
The seed trade 990
Cleveland 990
New Haven, Conn 992
Toronto 992
Bethlehem, Pa 994
Milwaukee, Wis 994
Cincinnati 994
Worcester, Mass 996
State flowers 996
Denver 998

RICHMOND, VA.—Easter trade much larger than last year with an increased demand for everything.

JAMESTOWN, N. D.—A. C. Hansen has purchased C. D. Porter's greenhouses and will continue the business.

SADDLE RIVER, N. J.—Hail as large as marbles fell on the 5th inst. Double thick glass was not broken.

PENSACOLA, FLA.—The Florida State Horticultural Society held its 6th annual meeting in this city April 11 to 14.

ONEONTA, N. Y.—Easter trade was larger than last year. The demand was mainly for loose cut flowers and pot plants.

PATERSON, N. J.—At the recent city election Alderman H. E. Chitty, the florist, was re-elected by a unanimous vote, the opposing party not having nominated any candidate to run against him.

The True Colors of Various Roses.

It is not an easy matter to say authoritatively what the true color of a certain rose is; more correctly speaking I should say *colors*, because there is scarcely a rose of which it may be said, this is pink, or that is red, or the other is crimson. In nearly every case we will find the rose has a complexion, that is to say, in regard to its color, it is a piece of complexity.

Now, here is the great difficulty; how are we going to reply to people who desire a simple answer to a question involved in complexity. Somebody says, for instance, "Tell me whether the sky is blue or gray to-day?"—and he wants a single word for answer! Well, he decides half the question for himself which ever way you reply, because he arbitrarily uses two color terms, to one of which he insists you must agree! But what are you to say if there is both blue and gray as well as green and yellow in the sky,—or what if there is neither blue nor gray, but instead, violet and pink there?

The only thing which it seems reasonable and wise to do, is to refuse the answer, and work over that man until you get the "blue and gray" out of him. The fact is, he is prejudiced. He looks at the sky with the colored glass of his imagination, and until he is deprived of this he cannot see clearly.

It is my wish here to knock the glass away which we are accustomed to look at roses through. Some of us use pink glasses, some milk-white, and others crimson. When once we throw these prejudices away, we will begin to see the complications which are involved in nature's own colors. The pink rose (so called) has yellow and green in it. The red rose shows some suspicious crimson. The white rose ceases to be white in anything but its name.

Now let us understand what certain simple colors really are. Pure yellow is like the wild mustard flower; pure red is like the carnation— nearly like the Portia, at least like that variety which will do its level best in brilliant (*not dark*) red color! Crimson is like some of the blue-red cinerarias, and scarlet is like the Anthurium Wardii. Pink is simply the glowing red carnation diluted with more or less white, if we can imagine such a thing, and magenta is a color lying between that of the purple cineraria and the crimson one; dilute this color greatly with white and we have the pale delicate petals of certain Baroness Rothschild roses. I cannot lay these short sums of color value down as *absolute* facts; they are conditions, which, according to my best knowledge of color, nearest approach the abstract names given to certain artist's pigments.

Applying, therefore, these names of colors to certain roses which are mentioned below, we are compelled to admit, that in order to be absolutely true in our color descriptions, we must modify more or less every single color name we attempt to apply to *every single rose*!

It is not only true that a variety is characterized by complexity of color, but often the difference between individuals of one family is extremely marked; and what is said of a certain rose, will not apply to another of the same breed!

We must discard then, the name of a rose when it is simple, "a red rose" for instance; poetically, the adjective will do! but scientifically it is not true.

In the accompanying list, the color names attempt, at least to be correct.

LA FRANCE:—Pale crimson pink in surface color, carmine pink in depths of color —really cooler than carmine but the latter's rich tone is perfectly true to the reflex of color in the heart of this rose. The curled edges of the petals are palest crimson pink.

GEN. JACQUEMINOT:—Intense red. At the heart a burning red somewhat qualified with yellow. The outer surface of petals, crimson in tone diluted with more or less white. This rose is *not* a crimson one; it is rather composite in character, but still the red absolutely predominates.

NIPHETOS:—Greenish yellowish white, waxy in character; at the heart of an opening bud there is a reflex of color somewhat buffish or salmon in tone, sometimes the outer petals are flushed with a pure pink. The opened Niphetos is luminous in color effect.

MME. GABRIEL LUIZET:—An "*all over*" pink in color, cool in tone and rather near crimson pink, not at all luminous, but rather possessing a fine surface quality. In the depths it is of a cool madder pink. Bluish-green foliage.

BARONESS ROTHSCHILD:—A most dilute but absolute crimson pink. Some specimens are of a magenta pink tone, i. e, a pink approaching close to lilac in color. There is a great deal of white in the pink, and some specimens appear quite close to the white indeed. The heart is cold in color still crimson pink in character. The surface color lacks any lustre whatever. Foliage a cold dark green.

CORNELIA COOK:—A yellowish white color, some petals assume a greenish tone particularly at their bases. There is a warm yellowish buff tone at the heart. The surface color is yellower than the lily but whiter than the "Bride" rose. The pervading yellow-white is exceedingly

luminous. Foliage very dark bluish green shiny in effect.

MADAME CUSIN:—Pale pure pink and crimson pink in color. There is very little crimson pink however, and that is on the outer petals. This rose is distinguished as the "Watteville" is, for its dual character; there is a great deal of luminous palish green-yellow at the base of the petals. The heart in its depths shows pure deep pink, and entirely distinct spaces of an orange-yellow color, varying more or less in intensity; but the dual color is plainly seen here. The foliage is of a deep green color, shiny, and variable in appearance as the leaves curl considerably.

THE BRIDE:—Decidedly yellow white all over color; quite yellow in the depths, and at the bases of the petals greenish. The color in general has a waxy texture. In some specimens the outer petals are flushed with a cool pink. At the heart it sometimes shows a buff color. Foliage light green.

CHEROKEE ROSE:—Cream white, of soft texture, a trifle greenish where the petal nears the base, and just under the stamens. Foliage is of a pale yellow-green color.

MAGNA CHARTA:—Very deep pure pink in general effect of color; some petals approaching a pure red. The outer petals are whitish pink rather crimson in tone. The heart of this rose shows a lustrous pink, and sometimes a true red color. Under artificial light the color is remarkable for its luminosity, and some specimens incline toward a red tinged with yellow. The foliage is of a deep warm green color.

There is not one of these ten roses which it would be truthful to describe with one color name. To hear one say, "she wore a pink rose in her hair" would give nobody a scrap of an idea, what the *variety* of the rose was. The new variety of a rose catalogued by the florist,—"delicate pink," leaves one just as much in the dark about the actual *color* of this rose; the term would answer quite as well for a Mermet as a Rothschild; yet there is a mile of pink between these two flowers!

F. SCHUYLER MATHEWS.

Rose Her Majesty.

MR. C. W. Eichling, New Orleans, sends us a photograph of a vase of four handsome blooms of this rose, regarding which he writes:

"This handsome bouquet of four perfect flowers was at the tip of a stem 20 feet high, on a plant grown by Mrs. Conrad Kressner. Her Majesty is seldom seen here with more than one flower to a stem. The extreme south is the land of the tea rose, and but few hybrids can be considered of real value in our gardens, hence the admiration bestowed upon Her Majesty."

Number of Blooms Cut.

ED. AM. FLORIST:—Replying to the query you submit, would say that for a house 60 feet by 18 containing La France, Wootton, Sunset, Mermet, Bride, Bon Silene, Niphetos and Papa Gontier, planted from 2-inch pots as described by your correspondent, he may be considered, if he is a beginner at the business, to have done fairly well for the time they have been planted. As I estimate it, it stands thus: Time of cutting the buds, five months and seven days, from September 10 to February 17 (which is probably the date of his letter), or 160 days, giving an average of 18¾ buds per day out of the house, or an average per plant of the same time of 7½ buds each. This cannot be considered an extra large amount to cut from such a house, yet, as above stated, if your correspondent is a beginner, it may be considered fair work, though many of the varieties, such as Bon Silene, Niphetos, Perle and Gontier, should certainly have produced a great deal more, in fact any of them should have produced much more. But another consideration is that plants from 2-inch pots July 20 means rather small stock at that late date, so that, all things considered, I think your correspondent has done very well.

JOHN N. MAY.

A Pansy Blight.

A leaf blight has been quite troublesome among the pansies. It is most frequently seen upon the outer and lower leaves, but in the worst cases the whole plant is ruined. The trouble manifests itself in large blotches upon the foliage, sometimes near the apex of the leaf and in other instances at the base. The three leaves in figure 1 show the blight in the base of the leaf in the specimen upon the left; that in the middle is at the apex and the leaf to the right is affected mostly upon one side. The affected portion of the leaf loses its characteristic green color and becomes brown or straw colored with numerous small black specks scattered over the diseased portion.

In figure 2 is shown the left leaf in figure 1 two and a half times magnified. In this it is the lower part of the leaf that is blighted and the diseased portion appears about as it would under an ordinary hand lens. The several pimples can be readily counted. The black specks are small, somewhat globular bodies which bear the spores of the blight fungus.

In figure 3 is shown a pencil drawing of a small portion of an affected leaf (not the one shown in figure 2) with the dark specks much magnified. They consist of a flask made up of the twisted filaments of the blight fungus belonging to the genus Phyllosticta. These flasks are immersed in the substance of the leaf and are connected with multitudes of fine threads which ramify throughout the leaf. When approaching maturity the upper and free side of the flask (pycnidium) projects through and extends for some distance above the leaf, forming a beak quite conspicuous for this genus of fungi. This projection turns to a dark brown and through its center lengthwise a canal forms for the free exit of the multitudes of spores that have formed within the body of the pycnidium.

A side view of these pycnidia is shown in figure 4 where is seen a section through an infested leaf with one flask upon each side. It is seen that the fungus is firmly seated in the leaf, in fact, it was formed within the leaf substance by a process of growth and only presented its open side to the surface in order that the spores might escape and spread the trouble elsewhere. A few of these spores are shown much enlarged in figure 5. They germinate quickly when conditions are favorable.

This is one of that sort of leaf parasites subject to the controlling effects of compounds of copper and no doubt if taken in time could be held in check by fungicides.

BYRON D. HALSTED.

Succession of Crops.

As by far the greater number of florists grow a general variety of plants and flowers, a few minutes talk with one of the successful men of this class around Philadelphia will perhaps be found interesting.

Jacob Becker, 52d and Market streets, is a good representative of this class of men, growing quite a variety of plants, including in his list soft wood bedding plants, chrysanthemums, roses for cut flowers, pot roses for market and a good assortment of Easter stock.

While on a visit to his establishment March 20 the first house to attract our attention was filled with azaleas in fine condition for Easter. The plants were last fall's importation and had been recently placed in this house, having been kept since their arrival in an adjoining house, occupying the side benches, while the centre table contained dormant roses. Previous to this the house had been filled with pot chrysanthemums, and before that time from June until October had been planted with roses for summer blooming.

Mr. Becker believes in economy of space, and keeps his glass in active service all the time. As an instance of this, the house in which the azaleas and roses were kept over the winter had been filled with pot chrysanthemums, and previous to this, from June until October, was planted with roses for summer blooming, thus keeping up a succession of crops every month in the year.

While the stock of azaleas were in fine condition, there were a few exceptions, a few plants having yellow or browned leaves, which Mr. Becker said was caused by too much water; he explained that in watering with the hose, the plan he adopts for most of his houses, it is hard to discriminate, and plants that don't require it get as much water as those that do.

"This variety, Bernard Andreas alba, requires but little water the first year, but after having grown it for a season, and there are a few of last years' plants among these, they grow as well as any other variety. This is because the pots become full of roots and absorb the water better."

Superba is another sort that he did not succeed well with the first season.

"Do you ever give manure water?"

"Oh no, never. They won't stand it. I once saw a lot of plants set outside in the summer that had been mulched with stable straw from the horse stalls, and it fixed them.

"Sigismund Rucker I find to be a good one for early forcing; it seems to come better then than later in the season.

"Simon Mardner is also a very good variety. I like it as well as Mme. Van Der Cruyssen. It is as good a color and seems to last longer when open."

The side benches of the large cold rose house where the azaleas had been kept was filled with tea roses, which had been forced in other houses until the latter part of January, when they were lifted and potted for spring sales.

"These make very salable plants for market, La France and Beauties being especially liked. The Bennett I shall not grow any more, as with me it only makes one good crop and the rest of the season doesn't amount to much. Mermets and Brides do not pay to pot up, as they never have enough buds at one time to make a showy plant. Perles and Gontiers do very well; they soon get over the moving and make salable plants in a short time."

"How many crops do you get out o this house in a season?"

"Well, we fill it with pot chrysanthemums from outside just before frost and when they are gone we pot up our dormant roses; after they are sold we plant with tea roses for a summer crop of flow-

Fig. 1.—Pansy Leaf Blight.

Fig. 2.—Pansy Leaf with Blight. Enlarged two and one half times.

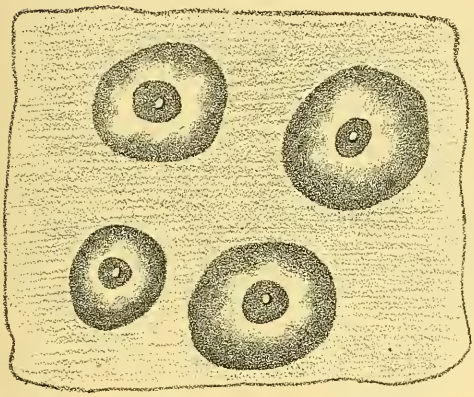


Fig. 3.—Small portion of Pansy Leaf affected by Blight, with the dark specks much magnified

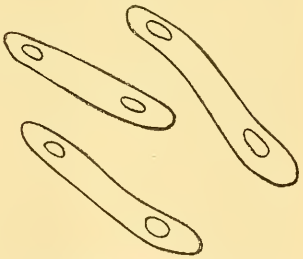


Fig. 5.—Spores of Pansy Leaf Blight (much magnified).

ers. In filling our houses with dormant roses in the fall we lock the pots together as closely as possible. Some men pack two layers, but we don't like it; it injures the bottom buds. We never allow the temperature to fall below 36°; freezing them makes blind wood in the spring."

"This is a fine house of Gontiers."

"Yes; they look well, don't they? I didn't have the heart to take them out. Gontier is our most profitable rose."

A bench on one side of a house was filled with hard wood rose cuttings, at least 90 per cent of which were rooted.

"You seem to have a fine strike here."

"Yes, they always do well on this bench. We make cuttings 4 to 5 inches long from wood pruned from the roses in the fall, when they are potted. It is very important in making cuttings that the cut should

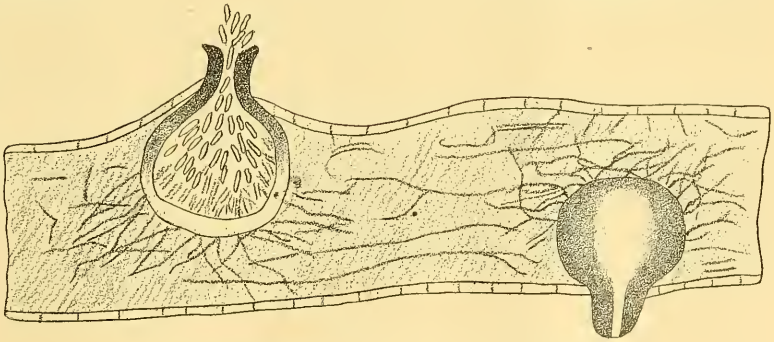


Fig. 4.—Section of Pansy Leaf to show views of the Leaf Spot Pycnidia.

be clean, so as not to bruise the wood; careless men will sometimes squeeze the cutting so as to split the bark, in which case it rarely takes root."

"You grow a few carnations."

"Yes, this house we plant with Duchess of Albany during summer for cutting; these and another house of Marie Guillots paid better then than other teas during January. About the middle of October we plants with carnations and about the first of March these are taken up to make room for geraniums.

"We try to keep the houses full all the time. As soon as the Easter stock is out of the way we move in roses from the pits and have plenty of small stock coming on to pot up and refill the spaces. We generally manage to sell out, with Decoration Day winding up the season. Then we commence over again for another year, avoiding the mistakes of the past season and trying not to make any in the next." K.

Miscellaneous Seasonable Hints.

Those who have Lilium lancifolium album, rubrum or roseum grown up a foot high from the pot must give the surface roots some nourishment in the way of a surfacing with some good loam and well rotted manure, but not fresh manure. Don't force these three lilies. There is plenty of other stuff, such as Lilium longiflorum and candidum, to be had till the end of June, and then will come in the great usefulness of the lancifoliums. Keep them cool and slightly shaded, with plenty of water, and free of greenfly. In July and August they are most useful, and in demand for designs, bunches or for decorating. The odor of the three first mentioned species is most agreeable, and no fastidious taste can object to it, but the magnificent and gorgeous L. auratum has a perfume that is altogether too overpowering for most people. While it is a question with some people whether it pays to bother with the old bulbs of longiflorum and Harrisii lilies after being forced, because new fresh bulbs can be so cheaply bought, there is no question that it pays well to take care of the lancifolium lilies. Growing them for summer-flowers is not forcing, and the bulbs are, if properly taken care of, good for next year's use.

Hydrangeas that are wanted for May sales will now want lots of care. There is no plant that will take or needs more feeding. If you potted them in fall when they were lifted and did give them liberal sized pots then, they will be sure to be well filled with roots now, and to keep the foliage a good deep green they must have liquid manure once or twice every week. If that is inconvenient to do put on half an inch or so of half rotten cow manure. Hydrangeas, if only in 6-inch pots, take up a large lot of room, and must be kept spread out or their bottom leaves will suffer. A plan I find useful to give me room is to stand a row of hydrangeas along on a bench of dwarf growing stuff, such as geraniums; take out three or four small plants and insert a 5-inch pot in their place, and stand the hydrangeas on them. The plants below won't suffer at all by this, but don't over-do it. One hydrangea every four feet is plenty thick enough.

With growers of a mixed collection it will now be a serious matter to make room, and some benches of carnations will have to be sacrificed. Think well over it whether it is better to throw out the carnations that will produce flowers till the end of August, for the sake of making room for a crop of bedding plants that will be gone by June 1. Decide at once on what you are to throw away, and the carnations that you intend to keep attend to at once. Scrape off a little of the old surface, sprinkle a good dressing of bone meal on the soil and cover that with one inch of well rotted manure. If they are properly tied up so that air and light can get among the plants, you will pick fine carnations till the houses are to be prepared for next winter's crop. There are no varieties for summer flowering indoors better than Hinze's White, Silver Spray, Tidal Wave, and better than all, Grace Wilder.

In many places Adiantum cuneatum is growing finely now. I have tried air slacked lime dusted on the pots and plants, salt on the benches, and other devices for destroying their greatest enemy, the slugs, but after all nothing beats pieces of cabbage leaves laid on the soil of the pots; it takes a little time to go round and destroy them, but a small boy can do the business, and if there are any slugs round they are bound to be found under the cabbage leaves.

Don't forget to divide or propagate your alternanthera which have been in flats all winter. There is no place but a hotbed that will grow them properly, particularly paronychioides major, the best of them all. WM. SCOTT.

Buffalo, April 17.

Seasonable Hints.

If the plants have been properly hardened off in a cool house or frame, the earlier they are set out the better. If taken from a house even moderately warm they will not stand a sharp freeze, which is very apt to occur even in May. When getting the plants ready for planting see that they are topped and weeded when necessary. This will save much work in the future.

We always mark out our ground with a garden seed drill. When the first row is started straight it is but little trouble to keep all the rest equally so, the drill making the next row. This makes a mark not too deep and yet distinct enough to be seen after a heavy rain.

It is not advisable to use water when planting, only see that the bulbs are well wet before knocking out. The tramping of the row by the feet (as previously referred to) firms the ground so that the young plants will stand a great deal of drought.

We usually commence planting about the first of May, and it is well into June before the last are ready to go into the open ground. In the meantime those first planted will need some attention, for the weeds will start with wonderful vigor. Therefore start the garden harrow running as soon as they make their appearance, at the same time taking care not to disturb the plants in the row. When more firmly established the harrow can be run closer to them. Nothing further is required in the field but close attention to hoeing, weeding and topping. This, however, will take considerable time through the season. Some hand hoeing will be necessary between the rows, and this should be done with a narrow hoe and a careful hand.

The weeding and topping will be the most laborious and tedious operations. Weeds must be kept down by all means, not only for the sake of appearances, but they are a real detriment to the plants. The hoeing and harrowing will leave numerous weeds close to the plants, and there is no other way we know of to destroy them but by hand. They will have to be gone over several times during the season. I suppose purslane is the worst weed we have in highly cultivated ground, and the rapidity of its growth in warm weather is something marvelous. The harrow or hoe will not kill it excepting when very small. Its great enemies are shade and frost. But a field of carnations makes little shade, and the frost comes too late in the season to be of service. There is but one way to keep it down—"keeping everlastingly at it."

Avondale, Pa. W. R. SHELMIRE.

Carnation Rust.

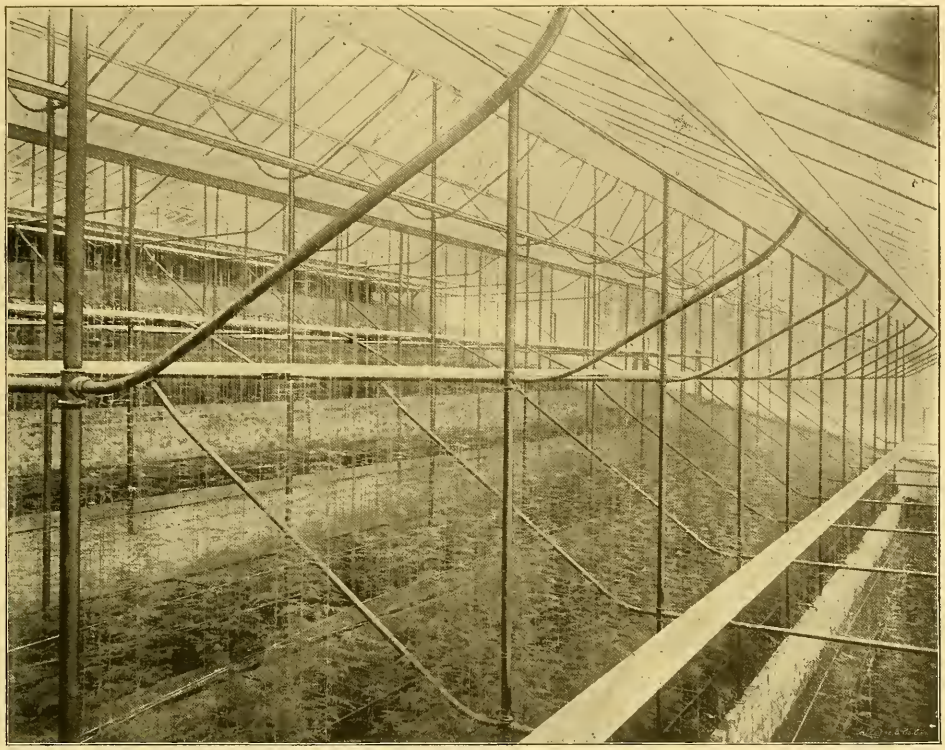
No one in the trade is more thankful to those kind hearted professors who so thoroughly enlightened us on the diseases common to carnations. They not only gave us the knowledge of the diseases, but also the best methods of combating them, and we can blame no one but ourselves if we allow any of them to make headway on our stock.

But are we not making a sort of bugaboo out of this carnation rust? I am inclined to think we are. Where is the crop of carnations that has been destroyed by the rust? What difference has the ravages of rust made on the cut flower market? Nowhere and none are the answers as far as my experience and observations have gone.

Two years ago there was a carnation sent out that was badly affected with rust; I got it and I know of a dozen others who purchased it about the same time, and with every one it was rusted badly. I used Bordeaux mixture on mine, and being a novice in the use of it, put it on too strong and killed every leaf and young shoot on the plants. The plants, or rather stubs, were left and in a few weeks began to push young growth, and as soon as they were fit I used them for cuttings, propagating about 900, and there has not been a spot of rust on these 900 up to this day, and they were the finest and healthiest plants on the place this winter. Some of the other growers tell me that they used nothing to cure the rust and propagated from the plants, and their stock this winter is clean. Their experience would show that a plant may grow out of the rust. My experience convinces me that a badly affected variety can be treated so as to produce good clean and healthy stock, and if I happen to get in the same situation again I will adopt the same method of procedure.

I know of a house up the state that was literally full of rust. It produced a good crop on Christmas and then the owner hired a lot of boys to pick off the affected leaves and the same plants produced one of the finest Easter crops that was cut in the United States. This grower's experience would prove that a fine crop of flowers can be grown on badly rusted plants.

It is not the object of this paper to encourage carelessness in the treatment of this disease; on the contrary, I do not think we can be too careful or diligent in fighting this or any other disease among



MR ELLIOTT'S BIG ASPARAGUS HOUSE.

the carnations. But for us to magnify the rust above all other diseases is folly. I, for my part, would rather have the rust to fight than either a bad case of spot or red spider, as it succumbs more readily to remedies than either of the others.

We were told in Pittsburg that certain varieties would not be attacked by the rust and hailed the information with joy. I purchased some 3,000 of one of these varieties and found among them when received about one dozen clearly defined cases of rust, not a large percentage, but enough to shake my faith in that theory.

Every carnation grower should inform himself exactly what rust is. I have had Mr. McBride's experience with some of the growers, and think that a little time devoted to the papers published in the FLORIST and a careful study of the illustrations should enable anyone to tell the rust at a glance. If every grower watches for it and as soon as he sees it exterminates it, there need be no fear of it getting enough of a start to become dangerous.

ALBERT M. HERR.

An Asparagus House.

The accompanying illustration represents a house recently built by Mr. W. H. Elliott of Brighton, Mass., expressly for the cultivation of Asparagus plumosus nanus. As the cut shows, the house is located on a hill side and is built in the most thorough manner. It is 61 feet wide and has a height of 25 feet and is heated by steam. The glass is 16x24 and there are two rows of ventilators, the system used being the Ormsby. The elevated plank walks are for convenience in reaching every part of the growing strings.

The house is strung for 18,000 strings, forty pounds of green linen thread having been required for this purpose. Each stool will throw from six to eight strings at once. The stringing and training of it involves much labor and attention. In addition to this the greatest nuisance is the brown cut worm, which has so far stood proof against any and all insecticides which Mr. Elliott has tried on it, hand picking being the only successful resort yet discovered. Mr. Elliott has observed that where chick-weed is allowed to grow through the beds the worms seems to be fond of it and it therefore acts as a very serviceable trap. His reason for the erection of these very tall houses is not as would be supposed wholly to obtain extra long strings. The asparagus when old and strong and planted closely in a bed has a habit of sending up its strings from three to six or eight feet entirely bare of foliage, and thus in a house of ordinary height it is impossible to get a well furnished string of available length. When growing rapidly considerable feeding is required by the asparagus, and this is given in frequent applications of manure water. A temperature of 56° at night is the rule, although it will stand 60° if necessary to hurry it up.

The ground is already broken for two more houses of the same size as the one illustrated, also a shed and office building 36x50 and three stories in height.

World's Fair Impressions.

BY A CANADIAN.

Some of the boys in Toronto may possibly like to hear the doings and impressions of their World's Fair representatives now at Chicago, and possibly also some other of your readers may feel interested in the opinions and criticisms of outsiders.

Things are scarcely in a state yet, however, to criticise much. An immense amount of work has already been done, but an immense amount still remains to be done before things can be got into good going order. No one who has not been here can begin to imagine the vastness of the whole.

The first thing that strikes one on entering the Horticultural Building is its immense size and height, and the next thing is that he who has the management of it must be a bold man and need have nothing small about him, and on looking round one soon sees plainly that the man who is in charge—"Uncle John"—is the right man in the right place.

The Australian exhibit of tree ferns, Platycerium alcicorne, Asplenium nidus and macrozamia, which is under his supervision, alone shows this, and it will be something the like of which has never been seen before on this continent.

The mountain under the dome was certainly an inspiration, as without such an arrangement it would have looked bare indeed; the vast height would have dwarfed the tallest specimens that could have been brought here. Mr. Donlan is making elaborate preparations on the New York space under the dome, but his large plants have not arrived yet. Pennsylvania and New Jersey, who will also both be under the dome, have not done anything as yet toward arranging their plants. Japan will have a garden laid out in native style in the curtain alongside of Ontario.

The Ontario exhibit of plants is now set up on the space allotted (which by-the-bye is in as good a position as could be found in the hall), but it will need some alteration and fixing up before May 1. Everything, with the exception of the crotons, traveled remarkably well, owing doubtless to the careful way in which they had been packed, but those crotons looked very sick a day or two after being unpacked, and Uncle John took pity on them and had them taken over to the hospital, where in about six weeks they will probably recover their pristine beauty. The loss of these plants makes rather a lack of color in the exhibit at present.

It did one good though to see Uncle John's eyes glisten when Araucaria Cunninghamii, A. Bidwelli and Sabal Andersoni were opened up and just fell out into their natural state as if they had only just been carried across the street, and I was told that he was in the hall at 5 a. m. poking his fingers into the packages. More of this later. E.

Victoria Regia.

We have several times published excellent engravings of this noble aquatic plant, but until now have never been able to secure a good photograph of an individual flower. The accompanying beautiful engraving is reproduced by the half-tone process from a splendid photograph taken by Prof. S. W. Burnham, the noted astronomer, who is also an amateur photographer and who can give points to the best professionals in the art of photographing flowers, trees, landscapes, etc.

The flower shown was cut from a plant growing in one of the ponds of aquatics at Lincoln Park, Chicago, last summer.

New York.

The past week has been a hard one on the florists and growers. Trade is at a standstill contrary to all precedent for this season of the year. The plants are not at a standstill, however, and the quantity of bloom dumped on the market every day is enormous. Prices are away below what they were at a corresponding period in former years. The quantity of large roses, such as Jacqs, Morrisons, Rothschilds, Luizets and Magnas on the market at low prices has a most unfavorable influence on the demand for the smaller varieties, such as Mermets, Brides, Wattevilles and Meteors, and prices on these are as low as can be and have any price at all. Meteors have no chance whatever in the present glut of Jacqs.

The quality of the stock coming in averages poor. There is a limited quantity of extra fine stock and heaps on heaps of inferior quality. Carnations alone seem to hold a good market, that is the white ones, especially the Lizzie McGowans; red ones are unsalable.

Bulbous stock is showing signs of slacking up. Tulips, daffodils and hyacinths are about wound up and the outside crop is not yet in. There are quantities of longiflorum lilies in the market, at very low prices. The retail florists are taking advantage of this fact, and at $30 or $40 a thousand find these showy flowers pretty profitable stock for big decorations. There are still some very handsome azaleas to be seen in the florists' windows. One brilliant red one in a Broadway window has a row of white grafted around the center stock and the enormous head five feet across, pink with a broad white border, makes a beautiful show.

Daisies and pansies have been planted out in all the parks and are blooming profusely. The floricultural authority of the New York *World* grows enthusiastic concerning them in this fashion:

"The golden pansy, once the favorite, has been shelved for one so reddish brown as to appear almost black. These black ones are the outcome of two years of experiment with slips and seeds, and they are all the rage at present. Still the French Golden pansy, which measures five inches across and is of the color of burnished gold, has its hosts of admirers." This is what the boys call "talking through his hat."

If all reports are true, there is going to be an unusual amount of greenhouse building this season. Mr. J. N. May will take possession of the Chris. Butler establishment on May 1, he having purchased it recently. It adjoins his own place, and he is to build quite an addition to the combined establishment.

Warendorf of Fourteenth street is to open another store shortly on Broadway.

Alfonso Jean, a florist living on West Third street, was held up by three boys on Tuesday last, who went through his pockets, taking $6.30 in cash therefrom. The young robbers have been arrested.

Boston.

The funeral of Mr. Lucius T. Peck took place on Thursday, April 13, and was attended by thirty-five members of the Gardeners' and Florists' Club, representing every branch of the business. The Episcopal burial service was followed by the impressive ritual of the Knights Templars, Boston Commandery officiating, the music being rendered by Howard M. Dow, organist, and the Mendelssohn Male Quartette. He was laid to rest in Cedar Grove Cemetery. There was a very large and beautiful display of flowers and floral designs. The cross and crown and the square and compasses were the emblems contributed by the Masonic bodies with which he was connected. From the Gardeners' and Florists' Club came a closed book, spanned by an arch, a very effective piece. The Co-operative Growers' Association sent a handsome wreath and sickle, and there were numerous pillows, wreaths and other designs contributed by the many friends who took this way to testify to their esteem, and express their sorrow at the loss they had sustained.

Cut flower business does not yet show the activity which is supposed to prevail after an early Easter. Flowers of all kinds are very plentiful, with the exception of carnations, of which there are none too many, although those that do come in are of excellent quality. Jacqs and Luizets are abundant and good. Smilax continues in short supply. The spring plant trade has not commenced yet. The season is very backward.

Mr. Otto J. Dorn, representing the Stott Garden Implement Co., has been in town the past week. He shows a new hose coupler which looks like a great improvement over anything of the kind ever before offered.

Mr. Winfried Rolker has also been a visitor to the Hub, and reports trade as excellent. He says that those who are timid on bulb contracts order without hesitation on azaleas, rhododendrons, etc.

C. V. Whitten has begun work on the erection of three more rose houses.

Philadelphia.

It has come at last, and there is howling and gnashing of teeth; everything seems to be going to the "bow wows," for the glut is on.

There are prices of all kinds; prices for Chestnut St., prices for 11th St., and prices for the stores up town. There are special prices, job lot prices, and last though not least, confidential prices, and it is the latter variety that cause the wailing among the growers. The old time motto of the growers: "If I don't get my price I will take my flowers home to the manure heap," is a thing of the past.

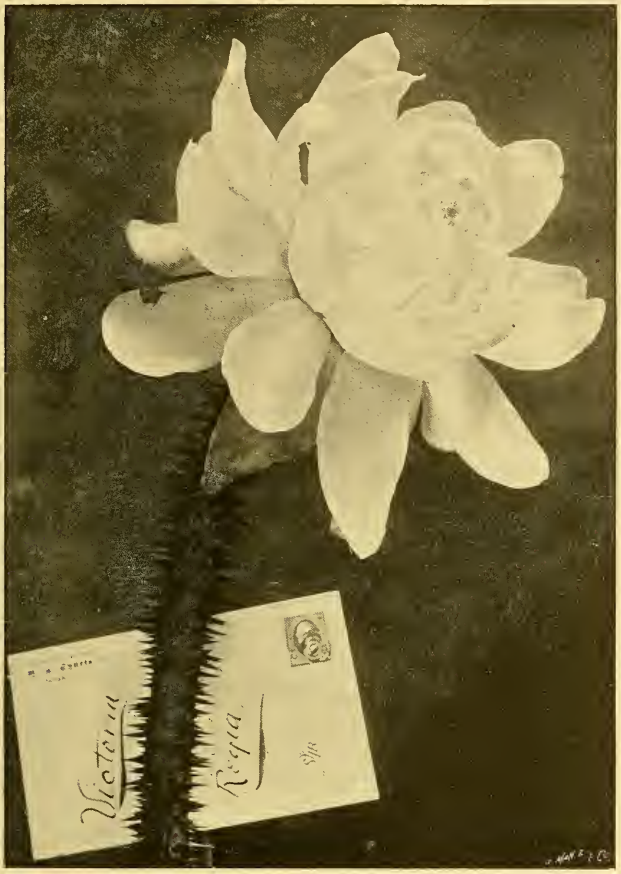
It is quite amusing when several growers or their helpers happen to get together in one store and hear the charges and counter charges as to why Smith sold this or that rose to Brown so far below the market price, which statement is immediately denied, and then when it is apparently proved by reason of what Brown said and the roses shown, "oh that was yesterday's stock," or, "it was a job lot, etc." and followed up by counter charges of other stock sold by so and so at even less. Another on being charged with asking one price down town, and a much cheaper rate up town, said that he never went up town, that the up town trade was supplied with what he carried home, this was sold the next day by another man in the uptown district, which statement would no doubt make the Columbia Avenue boys smile if they had heard it.

This sort of cut throat business was rather leaving the commission men out in the cold. The Philadelphia commission man is a rather curious sort of customer by the way. He must get his price or the stock goes to waste. In New York the commission men clean out every day. If the flowers don't go, the price does. It seems to us that this is the proper way to do business, let the demand and supply fix the price and when flowers are plenty give the people the benefit.

One of the commission men became so desperate at the state of trade the past week, that he put a man on the street with carnations, and sold them for ten cents a dozen, while his price to the trade was $1 to $1.25 a hundred. His lot is not the most happy one at present, as the fakirs went for him, the storekeepers "lit" on him and the growers are yet to be heard from.

There has been a fair amount of business the past week, there being quite a number of weddings although none of them were very elaborate affairs. All kinds of roses are very much in excess of the demand and the quality is beginning to fall off considerably, particularly in roses of the higher class.

A. L. Pennock & Son have had some very good Brunners and Laings, but the majority of the stock about town shows the effects of the warm weather or something else.



A BLOOM OF THE VICTORIA REGIA

Small teas are now bringing $2 to $3 a hundred, Cusins and Watteville's $3 to $5, Mermets, Brides and La France $4 to $6, Hybrids $25 to $50 for the best, Beauties $20 to $40, carnations $1 to $1.25, tulips $3 to $4, valley $2 to $3, Romans $2 to $3, sweet peas $1 to $2, Harrisii, so much an armful.

Easter being early, many growers were not quite up to time, and the quantity of lilies that are now bringing up the rear is truly appalling. If all the stock forced for Easter had been on time there would certainly have been a slaughter of prices; it is bad enough as it is. One of the commission men said: "It seems to me that anyone that has ever sent anything to me before has been sending in the past week. I don't open some of the boxes; it's no use. When they can't sell it anywhere else it is sent to me and I am expected to make returns."

John Burton has been sending out the American Belle the past week. The young plants are in fine condition and ready for duty at once. This is so different from the many new things sent out, which generally have to be nursed for a season to get them into shape.

Geo. C. Watson has resigned his position with John Gardiner & Co. His loss will surely be felt by that firm. The very happy faculty he has of writing advertisements that are at once caught by the eye and read clear through is possessed by few men and is an art in itself.

Robert Craig received a large consignment of palms, araucarias, bay trees and other ornamental foliage stock from Belgium the past week. It arrived in first-class condition and is the finest lot of imported plants we have ever seen. It reflects great credit on John Walker, who went over on purpose to select it. Some of the largest specimens will be sent to the World's Fair, but the great majority is added to the stock on the place. Mr. Craig has a large house of crotons all in fine condition, as well as a collection of tuberous begonias that are just coming into flower; they are remarkably showy plants. K.

G. A. WEDDIGEN, of Vernon, Texas, reported the first hail storm of the season. His loss will be paid by the F. H. A. of which he was a member.

Chicago.

At the last meeting of the Florist Club, Mr. E. Wienhoeber read a very interesting and instructive paper on "How to manage a retail store." He believed that wherever at all possible it was wise for the retail florist to have a store all to himself, as he believed that it was offensive to the best class of customers to be obliged to mingle with the customers attracted by some other business in the same store, and which was frequently of a class that did not accord in every respect with that of the florist. He spoke also of the importance of having a good display in the store proper as well as in the windows, stating that blooming plants could generally be used for this purpose at less expense than cut blooms. He believed that it was better to be very particular as to the quality of the stock purchased, and to charge a good fair price for the same, rather than to invest in a poorer grade at a lower price and make cheap rates a feature.

Another point upon which he laid considerable emphasis was the necessity of employing assistants who were gentlemanly and knew how to extend the little courtesies appreciated by ladies. He believed that it was very poor policy to pay very low wages to employes in a retail store, and that a few dollars a week more to a really good man was one of the best investments that could be made. He believed that under no circumstances should visiting florists be allowed to collect in the sales-room for the purpose of gossiping, and that where such visitors were received they should be entertained in the work-room at the rear of the store. He believed that no effort should be spared to be in such a position as to make payments, both to employes and those from whom stock was purchased, promptly. He found that where the grower could depend upon prompt payment of his account, he was much more apt to study to please the retail dealer, and that where a shortage in any line of stock occurred, the prompt payer is always given the generous portion, and the better portion as regards quality.

A vote of thanks was tendered Mr. Wienhoeber for his very excellent essay.

The Club's library was enriched by the addition of a set of bound volumes of the AMERICAN FLORIST, donated by the American Florist Company, for which the Club extended a vote of thanks.

Several new members were added to the roll.

The question of a competition at the World's Fair in August, in the arrangement of cut flowers, as mentioned in our report of the last meeting of the Club, was brought up, and in accordance with the action taken at the former meeting, a committee was appointed to take steps to interest the other Florists' Clubs of the country in the furtherance of plans for a contest. The president appointed as this committee Messrs. G. L. Grant, John Thorpe, E. Wienhoeber, F. F. Benthey and H. F. Halle. This committee will soon communicate with the other Florists' Clubs of the country and endeavor to secure an appointment of a representative board of managers, composed of members to be appointed by the various clubs, and to prepare a plan of procedure for the contest.

At the next meeting of the Club, to be held on the 27th inst., there will be another spread, similar to the one that was so much enjoyed last month.

Last Sunday the boiler at the greenhouses of Albert Fuchs exploded, doing

considerable damage to the greenhouses and seriously injuring the fireman in charge.

During last week the flower market was very dull indeed, up to Saturday; on that day stock was pretty well cleaned out. On Monday sales were very good, owing to the entry of the new mayor and aldermen into their official positions. A good many flowers were used in celebrating this event, chiefly in the form of floral designs; it was, perhaps, the only time this season when there was a big demand for short-stemmed colored carnations.

Roses are extremely plentiful, and fine in quality. Carnations are now the finest of the season. Violets are getting small, though a few good ones still come in. Bulb stuff is growing less in most classes, but it still sells very slowly. Some extra fine pink and white tulips sell fairly, but not the general run of such stock.

Narcissus poeticus from Mississippi has been sent in great quantities to the produce dealers on South Water Street, and is sold by them at terribly low prices. We are told of these flowers being sold at $1 a 1000; the produce men do not care to handle flowers, and are willing to sell them for the amount of the express charges. This has a bad effect on the poeticus grown here. Lilac is also sent in through the same dealers; much of it is picked short, poorly packed, without bunching, and put up without hardening, so it soon flags. But this, too, has a bad effect on good quality lilac; people see it about the streets cheap, and think the good quality should sell for the same.

Harrisii is a glut, and there is literally no demand for it. It is generally very good. It is expected, however, that the demand will increase in a week or two. Prospects are good for a brisk trade during the opening festivities of the World's Fair.

An adjourned meeting of the Horticultural Society of Chicago will be held at the Sherman House next Saturday afternoon, the 22nd inst.

Washington.

The stores were all beautifully decorated for Easter. Mr. J. R. Freeman probably had the most attractive window and store, and he certainly had the finest grown plants; his Harrisii were simply perfect. The plants were artistically arranged both in the window and store. These included hydrangeas, lilacs, azaleas, genistas, tulips, spiræas, ferns, palms and pandanus, all arranged for best effect.

Mr. C. F. Hale also had a fine display of flowering plants and cut flowers. Harrisii, hydrangeas, lily of the valley, spiræas, palms, ferns and araucarias were arranged in his best style.

Messrs. J. H. Small & Sons transformed their large window on 14th street into a small rose garden, with mound of ferns and gravel walks. Large clusters of the finest roses were arranged through the garden, representing plants in full flower. Back of this was arranged some fine specimens of rhododendrons in full flower, making a gorgeous display. The walls of the store were hung with smilax, the tables and benches were filled with choice plants in full flower and these, together with their stock of elegant cut flowers, and thousands of tiny electric lights, all helped to make their exhibition very attractive.

C. Strauss & Co's. store was also handsomely decorated with a profusion of blooming plants, including hydrangeas, Harrisiis, spiræas, valley, tulips, hyacinths, ferns, palms, rubbers, pandanus, daisies and genistas. These last were beyond doubt the finest grown plants in 7-inch pots ever offered for sale in this city, and were a perfect mass of bloom.

The Gude Bros. were not behind in making their store attractive. Their window and store room were decorated in their best style, with blooming plants and cut flowers of the best variety. They had a fine display of their own grown roses.

There was a far greater demand both for cut flowers and plants this season than any previous Easter. The quantity was in excess of the demand, consequently the prices were not so high as in former years, and for this reason a greater quantity was disposed of. The men in the market were overstocked as well as the store men, and both seemed anxious to dispose of their stock. They all report having done a magnificent business. The demand for church decorations of both plants and cut flowers was unusually large. Some of the churches were elaborately decorated.

The parks begin to look spring-like. Magnolias conspicua and purpurea, forsythias, cydonias and flowering apples, are in full flower. These are about three weeks later than last year. Forsythias and cydonias were in full flower last year on the 17th of March. The unusually severe winter has killed many of the shrubs and evergreens throughout the city.

The squares about the city begin to look as though spring had come at last. The beds which were planted with bulbs last fall are now in full bloom. Hyacinths, tulips, and crocus are to be everywhere seen. The grass is pretty and green, and in some of the parks the mowing machine can be seen.

Mr. G. H. Brown, Public Gardener, proposes growing 8,000 or 10,000 more flowering plants for the parks this year. They will take the place of many coleus and achyranthus. Mr. Brown think this will please the public better than so much carpet bedding, as for the past eight or ten years the beds in the parks have been planted principally with coleus, geraniums, achyranthus, alternantheras, variegated stevia and vincas. They are growing thousands of young plants of Euonymus japonicus radicans variegata, which they propose bedding and pinning it close to the ground, as was done last year in forming some Corps badges in the Pension Office grounds.

Mr. Brown and his efficient assistant and son, Mr. Percy Brown, are busy preparing the plans for the numerous beds. All the beds are planted from designs prepared in the office during the winter and early spring months and by this means Mr. Brown knows the exact number of each plant wanted and can see in his mind's eye just what the beds will look like when finished. The entire force will soon be engaged in bedding geraniums to give room to the more tender varieties. They will continue to propagate and plant out until the middle of June.

The annual banquet of the National Capital Press Club, at the Arlington Hotel, was a grand success. In novel effects, grandeur of decorations and unlooked-for surprises, the history of the banquet hall does not chronicle a dinner that equaled it. All that the genius of the electrician, or the artistic work of the decorator and florist could do, or the ingenuity of bright men could suggest was utilized to make the dinner one long to be remembered. Much labor and money had been expended. When the doors of the banquet hall swung open at 8 o'clock to admit the 125 invited guests, they were seated at the four tables which were arranged in the "double E" form. These tables were a mass of fragrant flowers and electric lights under colored shades. Suddenly a darkness that could be felt fell on them. There was not a ray of light. As suddenly a flood of brilliance poured upon the scene. From banks of flowers and green placed in the center of the middle table, and at each of the four corners emerged beautiful little flower girls and boys prettily dressed, bearing baskets of boutonieres, which they distributed, and were then spirited away. The singularity of the scene, its beauty, and the quickness with which the transformation was effected brought rounds of applause from the guests.

The walls of the handsome dining hall were draped with southern smilax and asparagus. Among them were countless numbers of brilliant electric bulbs which gave a dazzling light. The tables were massed with green, white and red. In the center was a mound of green representing a jungle, edged with tulips, at each of the four corners was a handsome cut-glass vase filled with long stemmed hybrid roses, having a basket of asparagus which formed the base from which peeped tiny electric lights.

On the theory that members of the newspaper profession at the Capital are the intermediary between public men and the world, and that the electric wires are the medium of communication, through the centre of the tables ran a telegraph line. The poles, which were an exact imitation, were about two and one-half feet in height. The cross arms bore from four to six wires and each pole was illuminated by a bunch of tiny electric lights in different colors. There were three telegraph stations with instruments, yellow pads and pencils all complete. They were manned by operating members of the club. At the base of each telegraph pole was a mound of Asparagus plumosus. The windows were banked with palms, among which were electric lights.

The stand for the musicians was elevated ten or twelve feet from the floor, and was almost hidden in vegetation. Immediately in its centre was a large and beautiful branch of laurel made of white metal and illuminated by electric lights. Against the left wall rested an enormous note book. An electric interrogation mark, some six inches long was at the top, and across the pages in flame were the words, "Know anything?" These lights were white.

Directly across the room was a large square bearing in electric bulbs the inscription, "Press Club, 18,–3,–'93," also in white. A little nearer the door and upon the left was a sword crossed by a pen. The sword was first shown perfect in form, it then died away, was again shown broken, and the pen flashed out, indicating of course its superior might.

The menu cards were as novel as the prelude to the feast. In front of each plate stood a miniature world, a globe about sixteen inches in diameter, showing all the countries of the earth, the seas that girdle the earth, and nearly everything else of a geographical nature. On its face were printed the names of the guests and the menu. Its surface in other parts was covered with witticisms and international allusions.

This novel decoration was designed by

Mr. Walter Wellman, President of the Club, and the Washington correspondent for the *Chicago Herald*. The floral decorations were furnished by Messrs. J. H. Small & Sons. The electric work, which was perfect in every detail, was done by the General Electric Light Company.

C. LESLIE REYNOLDS.

St. Louis.

The past week has been marked by extreme variable temperature, it having opened with genuine summer heat and after a heavy rain and wind storm cooled off until it was quite fresh during the night,—having reached 30° during Friday night. All the young growths were frozen stiff, but owing to the sun having very little strength the following morning things thawed out gradually, and as far as can be seen little damage was done.

The supply has kept pace with the weather, and from a glut during the first part of the week the supply dropped away until at present the supply and demand are somewhere near equal. Lilac from out doors has made its appearance and is quite plentiful; it takes for a short while, until the supply is so heavy that it swamps things.

The plant trade is booming, several firms saying they have never known the shipping to be as heavy as it is just at present. The indications are that it will continue good until the season is over.

During the heavy storm that visited this city on the night of the 11th inst. several of our florists were quite seriously damaged by hail. Mr. Wm. Schray was quite severely hurt. His houses run north and south and the storm coming from the west broke about one-half of the glass on that side, while the eastern side was but lightly touched. A house erected last year and glazed with large glass had about 75 out of 300 lights remain whole. Mr. Fellmore, whose place is within two blocks of Mr. Schray's, was also hit hard. Most of his houses run the same as Mr. Schray's, and had the west side pretty well knocked to pieces. Mr. Beyer and Mr. Meyer were also caught but not nearly so heavy. Fortunately the hail seemed to be confined to a very narrow area, to the satisfaction of those who escaped. Mr. Schray has been very fortunate so far in regard to hail, this being the first time he has been severely hurt. When the Florists' Hail Association got down to working order he insured, more he said to help the society than because he thought he would be benefited. Just at present, however, it seems as though he is to profit by his kindness.

August Jablonsky, of Wellston, although not visited by hail had quite as severe an experience. He retired Tuesday night and when he awoke and looked out next day his place was converted into a lakelet. His place lies on a hillside running all the way to the bottom where the houses are situated. A sub-division of the city is being land out just east of his place, and it appears that temporary wooden sewers were placed where the fills were made; one of these caved in, the earth from above following, completely blocked the outlet. There was all the way from three to six feet of water in the houses, and it had come within a few feet of his dwelling. All his carnations and violets that were planted out are under three inches of mud, the hot bed sash had floated all over the place and the stock in the frames ruined. It is expected he will be able to recover damages, a peculiar feature of the case being that although he resides in St. Louis county the cause of his damages occurred in the city.

The regular meeting of the Florists' Club occurred on the 6th. The finance committee met and ratified the action taken at the previous meeting, before the regular meeting was called. The exhibition committee reported and submitted a list of premiums to be offered at the fall show, the discussion and readjustment of this list occupied most of the time. It was finally fixed however to the satisfaction of all concerned. A committee was also appointed to see the trustees of the Shaw estate relative to the offering of the $500 in premiums as provided for in Mr. Shaw's will. Another committee was appointed to make final terms with the managers of the exposition hall, where the shows have always been held. From the interest manifested the show promises to be very successful.

Mr. Wm. Schray will build a rose house 20 by 100 feet, which will contain all the modern improvements, such as iron braces in the rafter joints, iron supports and purlins, front ventilation and 14-inch glass. A novel feature is the absence of the usual narrow back bench, the two middle benches being made wide enough to occupy the additional space thus gained.

It is rumored that the Robt. Hausperger Sons & Co. expect to build this spring and will double their amount of glass.

R. F. T.

Baltimore.

One of the most interesting discussions at the club meeting was brought out by this question, which was the second drawn from the question box: "Now that the bulbs are all sold has there been any profit in them?" Mr. Eckardt said he had forced four thousand and cleared about eight dollars. Mr. McRoberts thought them profitable when used to fill up vacant places and odd corners, as they could be grown where other things would not thrive. Mr. Fraser said too many were grown and strongly advised co-operation among members and limiting the amount of any crop produced in the city, especially Dutch bulbs. Then there was a little digression relating to the relative profit in forcing high priced or low priced bulbs and the lowest profitable selling price of pot hyacinths, some of the members holding that they could not be forced for ten cents without losing money, and that twenty or twenty-five cents was the lowest figure, while others seemed willing to undertake them for eight cents.

Another question was: "Why did not valley pay this year?" Mr. Seidiwitz thought the reason was that prices at retail were too high and scared off buyers. He had sold at fifty cents a dozen during Easter and considered that high enough. In connection with this was another question: "Does it pay to force valley at three cents?" Mr. Seidiwitz said it would pay at two cents. Mr. Wm. Ekas expressed doubts of that. Mr. Eckardt thought they might pay at two cents now, but not earlier in the season.

"Why do hyacinth spikes drop when brought into heat?" Mr. Eckardt was of the opinion that bad treatment was responsible, but Mr. Welsh had them drop off by the side of others that grew into perfect flowers, lost two hundred out of nine hundred forced. Mr. C. M. Wagner had trouble of the same kind, so had Mr. Hantske and President Moss. Mr. Wm. Ekas suggested that possibly the very severe frosts had injured the bulbs while covered outside before forcing.

Then came a debate on the difference between Parma and Lady H. Campbell violets, Mr. Seidiwitz giving as his opinion that Campbell is small and very dark while Parma is large and light. Mr. Wm. Ekas said he would defy any one to pick them out, and he had stock from the originator. Mr. Rodgers said Parma was much larger and lighter than any other handled at the Exchange.

Business generally is a little slow and flowers in excess of demand. The plant trade is coming to the front, though, and here and there an adventurous lady is daring Jack Frost by putting out geraniums.

MACK.

NEW BEDFORD, MASS.—Easter trade was first-class. There was a big demand for potted plants in bloom, also for violets, pinks and roses. Bulbous stuff, stocks and spiræa went slow. Prices were low on everything excepting pinks.

DETROIT, MICH.—S. Taplin will give up his store in the Opera House Block this month on account of ill-health. The store will be occupied in future by the Jno. Irvine Co., of Bay City. Easter trade in Detroit was very good, and a brisk plant trade is now opening.

MINNEAPOLIS, MINN.—Our Easter trade was about 30 per cent. larger than last year. A decided preference for blooming plants over loose flowers was a marked feature. Large numbers of lilies, hyacinths in pots, azaleas, hydrangeas, etc., were disposed of at good prices. The supply equalled the demand.

HARTFORD, CONN.—Easter trade was never better. Increased demand for decorative plants in pots such as azaleas, spiræas, Harrisii lilies and spring bulbous plants. Cut flower trade fine. Roses retailed at from $1.50 to $3 per dozen. Prices in general were low. The florists had a fine day and their stock was all cleaned out, leaving everybody happy.

ALBANY, N. Y.—The Easter trade in this city was larger than that of any previous year. The supply of both flowers and plants was extensive. Everything was sold, and more could have been sold, if orders could have been properly attended to, but the rush on Saturday was so great that many could not be waited upon. Among plants, lilies, azaleas, hydrangeas and hyacinths had the best sale. In cut flowers, roses, violets and carnations were in greatest demand.

ROCHESTER, N. Y.—Easter trade was in advance of last year in plants and flowers both, but not a heavy per cent. Some of the growers were late with lilies and hydrangeas, or there could have been more of both sold. Salter Bros. had a fine lot of both, and sold out of them early. The increase was in carnations and violets. There is a growing demand for nice small plants in bloom; azaleas were scarce. Rochester is a low priced place for flowers. Carnations sold before Easter at 25 cents and 30 cents per dozen, and at no time during the winter except at Christmas and Easter have they been more than 30 to 40 cents a dozen. The story of why it is would be too long to tell, but it is discouraging to know that Syracuse and Buffalo florists received 50 cents a dozen most of the winter for their carnations. Other flowers too have been sold below other cities of this size.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

YOU CAN never invest $2 to better advantage than in a copy of our trade directory and reference book.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—As foreman of commercial place, especially up in forcing roses. Only parties of character need reply. Ohio or St. Louis preferred. Address X Y Z, care American Florist, Chicago

SITUATION WANTED—As assistant, in private or commercial place; 24 years of age, German, speaks English; is well up in stove, flowering and hardy plants. Address W C, Box 45, Short Hills, N. J.

SITUATION WANTED—By 1st of May, by a practical Scotch gardener and florist, well up in all kinds of greenhouse plants, mushrooms, vegetables, grape growing, etc.; can furnish the best of references from Scotland, England and this country.
ROBT. MCINNES, care W. W. Coles, Kokomo, Ind.

SITUATION WANTED By practical gardener, well up in stove and greenhouse plants, fruit and vegetables; also landscape and ornamental work; 25 years practice in nurseries and private gardens in England and America; 3 years with present employer; best of references; married, no family. Address
F F, Elm Grove, Waukesha Co., Wis.

WANTED—Single man, as assistant, one who has had 3 or 4 years experience; German or English preferred. Address P. O. Box 116, Lake Forest, Ill.

WANTED—A first class designer and decorator, must be temperate and come well recommended. Address THE DENVER FLORIST CO., 1735 16th Street, Denver, Colo.

WANTED—An assistant florist; must be A No. 1 rose grower and a sober man; will pay $30 per month and board.
F. S. JOY & SON, Nashville, Tenn.

WANTED Single man of energy and ability for roses and cut flower stock. Address with terms and experience J. T. WILLIAMSON, Prop. La Rose Gardens, Memphis, Tenn.

WANTED—To purchase, very cheap, the 10 or 12 last years of the "Garden" of London, even incomplete or soiled.
LONGPRE, 104 E. 84th St., New York City.

WANTED—A good man for general greenhouse work; must be quick and obliging and able to wait on customers. Good references required. Wages $25 per month with board.
W. W. COLES, Kokomo, Ind.

WANTED—At once, a good grower of roses and general cut flowers, as a working foreman. When writing give references and state terms. None but a first class all round florist should apply. Address O K 43, Am. Florist. Also wanted a good assistant.

WANTED—Soon, a competent man as a working foreman in commercial place; must be first class grower of roses, carnations and other cut flowers. Address, with copies of references and wages required; also give other particulars.
W. L. MORRIS, Des Moines, Iowa.

WANTED—A young man as assistant gardener on a private place, one having a good general knowledge of gardening and able to furnish satisfactory references as to ability and sobriety; English or Scotch preferred. Address
B, P. O. Box 132, Yarmouthport, Mass.

TO RENT—6 houses in Chicago with 11,000 feet of glass, stocked with forcing stuff, roses, carnations violets, smilax, etc. Address
R F, care American Florist.

FOR RENT Five greenhouses in one of the best suburban towns of Chicago. Good retail and wholesale business. Well stocked with general line of stuff. Address for particulars
G S, care American Florist, Chicago.

FOR SALE—Greenhouse near Chicago, rebuilt, 6,000 feet of glass, stocked with smilax, carnations and roses, heated by hot water. Address
W. J. DOWNES, 906 Sherman Ave., Evanston, Ill.

FOR SALE—$3,000 buys a good paying retail florist business in a booming city of Western New York. Lot 60x360, two-story dwelling, three greenhouses, all full of first class plants ready for sale, shed, new boiler etc. Address EXCELSIOR, care American Florist.

FOR SALE OR LEASE.

Florist's Establishment near New York City.

Florist establishment situated five miles from Harlem Bridge, in Westchester County, containing six acres of land in nursery stock with dwelling house, shed, barn, etc. 25,000 feet of glass heated by steam and hot water, well stocked with Palms, Ferns and Roses, doing a good home and wholesale trade. Never failing supply of water. Will only rent to a reliable party. Address
E. W. P., care Weeber & Don,
114 Chambers St., New York City.

FOR SALE OR TO RENT.

The following greenhouse property, situated on the outskirts of Springfield, the City of Houses, or will sell Greenhouses, Stock and Fixtures and give ten years' lease of 2 acres land. Ten houses in all—5 houses, 10 feet wide, 65 feet long; 1 houses, 18 feet wide, 65 feet long; 1 house, 18 feet wide, 65 feet long. Steam plant! New double Florida Boiler. Stock in good condition, with a large and extra good home market. This is an opportunity for a life time, as present owner has other interests to look after. If you are looking for a chance, apply at once to

N. D. WINTER,
5 Elm Street, SPRINGFIELD, MASS.

TAKE YOUR CHOICE.

FOR SALE—An old established Florist Business at Dorchester, Mass., comprising 20,000 feet of land centrally located, on which are: 1 house 76x18 filled with Carnations; 1 house 50x16 filled with Roses; 1 house 40x11 filled with Violets; 1 house 50x10 filled with Violets; 1 lean-to 20x7 filled with Violets; 1 dwelling house 7 rooms. Plants in good condition and houses in good repair. Price $6,000.

FOR SALE OR RENT—A well equipped establishment within eight miles of Boston, comprising 8 acres of land on which are 1 house 120x20 filled with Mermets and Silver Sprays; 1 house 100x24 filled with Wilders and Plants; 1 house 100x11 filled with Wilders; 1 house 100x11 filled with Adiantums, 3½-in. pots; 1 house 100x11 filled with Callas and Bouvardia; 1 house 100x11 filled with Callas, Bouvardia and Portia; 1 house 100x11 filled with Violets and Mignonette; 1 heated frame 100x6 filled with Mignonette; 1 propagating house 75 ft. long. Price $22,000.

FOR SALE—Eight miles from Boston, 1 acre of land, 8,000 feet of glass, including 4 houses, 100x18, 1 dwelling house 7 rooms. Apply to
N. F. McCarthy & CO. 1 Music Hall Place, Boston Mass.

AMERICAN BEAUTY

2¼ inch pots, $8.00 per 100.
3 inch pots, $12.00 per 100.

JOHN BURTON,
Chestnut Hill, PHILADELPHIA, PA.

ROSES.

TEAS . . . . . $30.00 per 1000
HYBRIDS . . . . . 40.00 per 1000
Healthy plants, in 2-inch pots
Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.
Trade list on application.

Jacob Schulz,
LOUISVILLE KY.

ROSES.

Finest stock in Northwest

Duchess of Albany, La France, Catherine Mermet, Waban, The Bride, Mme. Hoste, Niphetos, Perle, Sunset, W. F. Bennett.

C. A. SMITH FLORAL CO.
77 7th Street, South, MINNEAPOLIS, MINN.

ROSES.

Hoste, Mermet, Woottons, 3 inch at $8.00 per 100. Brides, Mermets, Hoste and Mad. Pierre Guillot, 2 inch at $4.00 per 100. Meteors at $5.00 per 100. A specialty made of growing for future delivery. Cash with order.

R. F. TESSON,
West Forest Park, - - ST. LOUIS, MO.

FOR SALE.

Who? KOFFMAN.
Where? WALDEN, ORANGE CO., N. Y.
What?

Adiantum Cuneatum Plants,
from 8-in. pots for propagating
$20.00 per hundred plants.

When? FOR IMMEDIATE DELIVERY.

When writing mention the AMERICAN FLORIST.

THE GREAT ANTIPEST.

For particulars, see next week.
R. W. CARMAN, GEN'L AGT.,
291 Amity Street, FLUSHING, Queens Co., N. Y.

ROSES

AMERICAN BEAUTY, 2½-inch pots $8.00 per 100. Also Bride, Mermet, Hoste, Wootton, Perle, Sunset, Meteor, Gontier, Cusin, Watteville, La France, $6.00 per 100; $50.00 per 1000.

MME. TESTOUT, $25.00 per 100.

CARNATIONS

DAYBREAK, $3.00 per 100; $25.00 per 1000. Portia (selected and extra selected), W. F. Dreer, Fred Creighton, Hinze's, Puritan, Lizzie McGowan, Grace Wilder, White Dove, Crimson and Peachblow Coronets, rooted early, very strong and healthy. In flats and in pots. Prices on application.

CANNAS

	Per 100
Mme. Crozy, fine plants	$15.00
Admiral Courbet, fine plants	8.00
Premices de Nice, fine plants	5.00
President Faivre	5.00
French Cannas, mixed	5.00

EDWIN LONSDALE,
WYNDMOOR, Chestnut Hill P. O., PHILA., PA.

✳ Roses ✳

Fine healthy stock.
Brides, Mermets, Perles, Sunsets, LaFrance, Meteor and Watteville.
From 2¼ inch pots, $4 per 100; $35 per 1,000.

CARNATIONS.

Strong healthy plants from flats.
Hinze's White, Lamborn, Fred Creighton, Grace Wilder and Portia
$2 per 100; $15 per 1,000 if ordered immediately.

B. REDFIELD, - Glenside, Pa.

3 1-2 Cent Roses.

HYBRID PERPETUAL and CLIMBING, Clean Healthy Stock, grown in 2½-inch pots. Such varieties as

Gen. Jack, La Reine, La France, Duch. of Albany, Anna de Diesbach, Perfection Des Blanches, Coq. Des Blanches, Giant of Battles, Md Masson, Souv. De Duchere, P. Queen, Balt. Belle, Pride of Washington and Russell's Cottage.

JAMES BROWN, JR.,
WHITEHALL, ILL.

Cycas Revoluta

The Largest and Best Selected Stock of Cycas Revoluta, fronds and roots cut off, true long leaved variety, now on hand.
For general Japanese and Australian stock, apply to

F. GONZALES & CO.,
303-312 Wayne St., SAN FRANCISCO, CAL.
☞ Send for catalogue

The Grand New Forcing Rose,

"American Belle."

Prices and full particulars on application.
John Burton, Chestnut Hill, Philadelphia

Golden Returns.

200,000 ROSES 200,000

We offer well established, healthy plants in below named and many other sorts:

From 2-inch pots, $ 3.00 per 100; $30.00 per 1000
From 3-inch pots, 6.00 " 60.00 "
From 4-inch pots, 12.00 " 120.00 "
Not in excess of any one variety.

50,000 Hybrid Perpetual Roses 50,000

at $4 per 100; $40 per 1000, in 50 select varieties.

New and Rare Varieties at Special Rates given in our Wholesale List, now ready.

WE NAME A FEW SORTS ONLY:

Aurora, Bosanquet, Comt. de Labarthe, Bon Silene, Cels, Devoniensis, C. Mermet, Etoile de Lyon, Hermosa, Mme. Cusin, H. M. Stanley, Malmaison, Marie Guillot, Mme. Lambard, Marie Lambert, Marechal Niel, Kruger, Niphetos, Mme. Jos. Schwartz, Safrano, Perle des Jardins, Sombreuil, The Bride, etc., etc.

For anything in the Florist line, or send your lists to be priced. Address

NANZ & NEUNER,
LOUISVILLE, KY.

ROSES

I grow all the leading forcing varieties such as

Mme. Testout, K. A. Victoria

Meteor, Wootton, Beauty, Perle, Bride, Mermet, Watteville, etc.

Let me figure on your order for May, June or July delivery, for first class stock.

MUMS. A good stock in 2-in. pots of all the leading cut flower and commercial varieties at $3.00 per 100; $25.00 per 1,000. Guaranteed true to name.

W. W. COLES, KOKOMO, IND.
Maple Hill Rose Farm.

The New White Rose
KAISERIN AUGUSTA VICTORIA.

From 3-inch pots, $35.00 per 100. 5-inch pots, $5.00 per dozen; $40.00 per 100.

THE NEW VIOLET ROBERT GARRETT.

The healthiest and strongest growing violet up to date: strong, well-rooted runners, $3.00 per 100; transplanted runners, $4.00 per 100. Cash with order. . . . .

JOHN COOK,
318 N. Charles St., BALTIMORE, MD.

Mention American Florist.

Hybrid Perpetual Roses,

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.

Price Lists to applicants. Address

WILLIAM H. SPOONER,
JAMAICA PLAIN, (Boston), MASS.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST. . . . . .
ANCHORAGE ROSE CO., Anchorage, Ky.

BRIDESMAID,

Mme. Cusin, Mme. de Watteville, Bride and Meteor.

FOR PRICE LIST, PRIME STOCK, BARGAINS,
Address

FRANK L. MOORE, Chatham, New Jersey.

MADAME CAROLINE TESTOUT.

The best rose of its color in existence. It has been fully tested in the New York market and

IT SELLS.

Healthy plants from 2½-inch pots now ready. Per 100, $25.00; per 1000, $200.00; 500 at 1000 rates.

ERNST ASMUS, West Hoboken, N. J.
Mention American Florist.

ROSES FINE HEALTHY PLANTS FROM 2¼-INCH POTS.

Perles, Brides, Mermets, Niphetos, Papa Gontier, Hoste, Watteville, Cusin,
La France, Albany, Wootton, at . $5.00 per 100, $45.00 per 1,000.
Meteor at . . . . . $6.00 per 100, $55.00 per 1,000.
Climbing Perle, at . . . . $10.00 per 100.

John Henderson Co.,
FLUSHING, N. Y.

FORCING ROSES.

PLACE YOUR ORDERS WITH . . . . . .

BROWN & CANFIELD,
527 WALNUT STREET, SPRINGFIELD, ILL.

And you will get the

Finest Stock on Earth.

ALL THE LEADING VARIETIES. - WRITE FOR PRICES.

ROSES. Clothilde Soupert. ROSES.

$6.00 PER 100.

Grand, healthy plants from 3-inch pots, are in splendid condition for Spring sales. We make this price to move them quickly.

MERMET, NIPHETOS, BRIDE, GONTIER, WATTEVILLE and HOSTE, from 2-inch pots, $4.00 per hundred.

DAVID CLIFFE, Germantown, Phila., Pa.

ROSES,
CARNATIONS AND VIOLETS,
STRONG PLANTS,
WRITE FOR PRICES.
Kemble Floral Co.,
OSKALOOSA, IOWA.

Albany, La France

And few other varieties from **COLD FRAME**—in good shape. 3 and 4-inch pots, $7.00 and $9.00 per 100.

BROWN & CANFIELD, Springfield, Ill.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

How to Grow Cut Flowers.

A few weeks ago we gave a short notice of a book bearing the above title, written and published by M. A. Hunt, Terre Haute, Ind. Our note was then made rom advance sheets; we now have the completed volume before us.

A practical book by a practical man must always possess a peculiar value, and we have no hesitation in pronouncing Mr. Hunt's treatise a big advance over anything in its line previously published. It opens with a chapter on greenhouse construction; this is followed by ventilation and heating, different systems being explained, and their advantages pointed out. From this the author passes to the various florists' flowers, treating on roses of all classes, carnations, chrysanthemums, violets, mignonette and bulbs. The cultural notes are copious, covering soil, temperature, watering, pruning, tying, grading and packing. The book is written throughout in a very practical style, and there is no attempt at "padding" with unnecessary words. The author knows what he has to say, and he says it in plain language.

The chapters on insect enemies and plant diseases are thoroughly practical, giving the best remedies and preventives known at the present time. The fungoid diseases are described simply, so that there can be no difficulty in recognizing them, and the best formulas for prevention or cure are fully given. The last chapter is full of miscellaneous hints, which will be found very useful.

In his preface, Mr. Hunt modestly says that his book is "a plain story, the result of a life of both experience and observation." It is more than that; it is a most useful handbook for our trade, and should be a part of the business library of every florist. It contains 228 pages and 36 illustrations.

PANSIES showing fine variety in color and marking were recently received from W. J. Engle, Dayton, Ohio. Some of the bronze and red margined blooms were specially attractive, and there were some good dark forms.

A WHITE GERANIUM, sport from White Swan, has been sent us by Miss Rosa Tascher, Plymouth, Ind. We are informed that in growth it resembles White Swan, but is more free in blooming. It is a very clear pure white.

A HOLLAND nurseryman writes to tell us his surprise and pleasure at finding his collection of rhododendrons sent to the World's Fair already planted among the other exhibits, upon his arrival to attend to this operation in person, and wishes, on behalf of the Holland exhibitors, to publicly thank Mr. Thorpe for the generous treatment accorded them and the splendid care given the plants sent.

WE HAVE RECEIVED the report of the committee on classification of the American Chrysanthemum Society for 1892. In addition to the lists of varieties recently introduced, it contains a full alphabetical list of all the varieties known in cultivation here.

AMERICAN GRAPE TRAINING, by Prof. L. H. Bailey, is a monograph of grape pruning and training, comprising the various systems used by American culturists. It contains 90 pages and 37 illustrations, and is issued by the Rural Publishing Co.

WE HAVE RECEIVED from Mrs. M. E. Eaton, Lyons, Iowa, a photograph of one of her greenhouses, among the contents being a good showing of L. Harrisii in excellent bloom. The house is of modern construction and does credit to the owner.

ST. PAUL, MINN.—Easter trade with us was very good indeed; better than for several years. There was a large demand for Easter lilies and also for flowering plants, especially those which could be sold at 50 cts. to $1. There seems to be a growing demand here for cheap priced plants at Easter time, and we think that a nice trade can be established in that direction in the future. We think that the general low prices prevailing this Easter had something to do with the increased sales.

HAVELOCK, ILL.—Michael Enders has purchased the interest of his partner in the firm of Enders & Gresser at this place, assuming all liabilities of the old firm.

Cape Flowers, new crop in best white quality at $1.25 the lb.; 10 lb. lots, $10 net.

Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 30 in. upwards, at 45c., 50c., 60c., 75c. and $1.00 each, according to length.

Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.

Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.

Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc. For prices consult our

Trade Catalogue, mailed free.

August Rolker & Sons,
136 & 138 W. 24th St., P. O. Station E. **New York.**

NEW BEDDING BEGONIA
THURSTONII.
Strong plants, $1.00 per dozen; $6.00 per hundred.
I. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

Healthy rooted runners **Marie Louise Violets,** 90c per 100, $5.00 per 1,000.
Phebe A. Baker, Media, Delaware Co., Pa.

FARFUGIUM GRANDE.
First-class plants. Price $8.00 per 100; $1.25 per dozen, by mail. Postage prepaid.
TILTON BROTHERS, 222 Grove St., Aurora, Ill.

PANSIES in bloom. Sample 100 $2.25. See advertisement in Rose Number.
W. J. ENGLE, Box 211, Dayton, O.

WHOLESALE FLORISTS
La Roche & Stahl
N. E. CORNER
13th & Chestnut Sts.,
PHILADELPHIA.

SAMUEL S. PENNOCK,
Wholesale Florist
REMOVED TO REAR OF 42 S. 16th ST.,
Philadelphia, Pa.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE
FLORIST,
1122 PINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STEET,
St. Louis, Mo.

THE SMILAX KING!
Who? **KOFFMAN,**
Where? WALDEN, Orange Co., N. Y.
What? **SMILAX**
25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.
When? ALL THE YEAR AROUND.
And he pays the Express.

IF YOU NEED ANY
Cape Flowers, Immortelles, Grasses, plain or fancy **Baskets, Metal Wreaths, Letters, Doves,** or any other thing in the Florists' supply line, mail us your order.
REMEMBER WE ARE THE
Leading Manufacturers of Wheat Sheaves and Baskets, and Importers of **Florists' Supplies.**
Catalogue on application
ERNEST KAUFMANN & CO.,
113 N. 4th Street, PHILADELPHIA, PA.

MARSCHUETZ & CO.,
FLORISTS' • SUPPLIES
23 & 25 N. 4th St., PHILADELPHIA, PA.
Send for Catalogue.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.

	Per 100
Perle, Gontier, Niphetos	$ 4.00
Mermets, La France, Bride, Wootfonns	6.00
Meteors	8.00
Jacqs	12.00
Carnations, short	1.00
" long	2.00
" " fancy	2.50
Romans, Valley, Narcissus, Tulips	3.00
Violets, Adiantum	1.00
Callas, Harrisii	10.00
Smilax	20.00

In effect till next issue of this paper.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
116 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.: Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange.
45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY & CO.
Wholesale and Commission
FLORISTS,
45 Lake St, CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

A. G. PRINCE & CO.,
Wholesale and Commission
FLORISTS,
45 LAKE STREET,
In Chicago Cut Flower Exchange. CHICAGO.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

WHITE DOVES
FOR FLORISTS.
Largest and finest stock in the United States. Write for prices to
S. J. RUSSELL,
103 Van Winkle St. Jersey City, N. J.

Mention the American Florist when writing to advertisers on this page.

Wholesale Market.

Cut Flowers.

NEW YORK, April 18.

Roses, Bon Silene, Gontiers	1.00@ 3.00
" Perles, Niphetos	2.00@ 3.00
" Mermet, Bride, Hoste	3.00@ 5.00
" Cusin, Watteville	2.00@ 4.00
" Bridesmaid, La France	3.00@ 6.00
" Meteor	2.00@ 4.00
" Jacqueminot	6.00@12.00
" Beauty	10.00@40.00
" Hybrids	10.00@31.00
" Mme. Caroline Testout	10.00@20.00
Carnations	.75@ 1.50
Valley, hyacinths, tulips, daffodils	2.00@ 3.00
Harrisii	2.00@ 5.00
Callas	3.00@ 6.00
Violets	.50@ 1.00
Cattleyas	50.00
Mignonette	1.00@ 5.00
Adiantums	1.00
Lilac (bunch)	1.00

Roses in thousand lots from $10.00 to $15.00 per 1000.

BOSTON, April 18.

Roses, Niphetos, Gontier	4.00@ 6.00
" Perle, Sunset	6.00@ 8.00
" Bride, Mermet	8.00@10.00
" Jacq., Lutizet	12.00@25.00
" Brunner	25.00@40.00
Carnations	1.00@ 3.00
Violets	.50@ .75
Lilies, Harrisii and Longiflorum	8.00@12.00
" Candidums	3.00@ 5.00
Lily of the valley, tulips, daffodils	2.00@ 3.00
Narcissus Poeticus	1.00@ 2.00
Mignonette	2.00@ 4.00
Heath, per bunch	50 to 75 cents
Primroses, per bunch	48 to 40
Adiantum	1.00@ 1.50
Smilax	20.00@25.00
Asparagus plumosus	50.00@75.00

PHILADELPHIA, April 18.

Roses, Brunners	10.00@35.00
" Lafrays	15.00@30.00
" Beauties	20.00@35.00
" Belles	35.00
" La France, Mermet, Bride	4.00@ 6.00
" Cusin, Watteville	3.00@ 5.00
" Jacqs	8.00@10.00
" Perle, Gontier	2.00@ 3.00
Valley	2.00@ 3.00
Carnations	.75@ 1.25
Daffodils, tulips	3.00@ 4.00
Mignonette	1.00@ 2.00
Asparagus	50.00@75.00
Smilax	20.00@25.00
Adiantum	1.00@ 1.25
Harrisii	5.00@ 8.00
Callas	5.00@ 8.00
Sweet peas	1.00@ 2 00

CHICAGO, April 18.

Roses, Perles, Niphetos Gontier	3.00@ 4.00
" Mermet, La France, Albany	4.00@ 5.00
" Brides, Wootton Bennett	4.00@ 5.00
" Beauties	10 00@25.00
" Jacqs	10.00@15.00
" Hybrids	15.00@20.00
Carnations (short)	.75
" (long)	1 00@ .50
" (fancy)	2.00
Callas, Harrisii	10.00
Romans, Valley	3.00
Violets	.75@ 1.00
Smilax	15.00@18.00
Lilac (per bunch)	50c.

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

WHOLESALE FLORISTS,
JOBBERS IN . . .
. . FLORISTS' SUPPLIES,
FLORISTS' VASES.
METS, BRIDES, GONTIERS, CARNATIONS, ALWAYS ON HAND.
1 Music Hall Place,
BOSTON, MASS.
HORTICULTURAL AUCTIONEERS. . .

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St, BOSTON, MASS.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
The finest Roses, Violets and Carnations
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country. Price list on application.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

H. BAYERSDORFER & CO.,
WHOLESALE
FLORISTS' SUPPLIES ONLY,
56 N. 4th Street,
PHILADELPHIA, PA.
Our new Catalogue is now out, free upon application.

The Seed Trade.

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1883. Applications for membership should be addressed to Wm. Meggatt, chairman membership committee, Wethersfield Conn.

ISAAC TILLINGHAST, of LaPlume, Pa., is reported as sold out by the sheriff.

IT IS announced that Mr. Geo. C. Watson has severed his connection with the Philadelphia firm of John Gardiner & Co., of which he has for several years been manager.

A N. Y. SEEDSMAN who has built up recently a large trade in sugar beet seed, reports that last season's demand of many tons has decreased this year to a few pounds, in anticipation of legislation affecting the sugar bounties.

HARTFORD, CONN.—Royal D. Hawley died at his home on Main street on April 9 after a painful illness of more than three months. Thirty-four years ago he took a position as clerk in the seed and agricultural store of J. W. Royce and succeeded to the business at the death of Mr. Royce a few years after.

Cleveland.

Easter trade was in dollars and cents the same as last year. On account of the cool weather the week previous there was not such an abundance of cut flowers as usual, and it had a tendency to keep buyers indoors. There was more demand for flowering plants than ever before, and it kept all the florists busy with their delivery force to get orders out on time on Saturday, and even then several loads had to be left till Sunday morning, which should not be, as the average florist has his hands full to get out his cut flower orders on Easter Sunday morning and have them delivered before church time.

Prices ruled somewhat lower than usual. All choice flowers called for were ordered sent loose in a box and there was scarcely any made up work. Bulbous stuff moved slowly. Choice roses sold best of all and there were not enough Jacqs, Brunners and hybrids in the market. L. F. D.

PROVIDENCE, R. I. The best Easter trade we ever had. Harrisii lilies and H. P. roses in pots were in great demand at good prices. Violets and carnations sold well. Bulb stuff don't pay the grower. Business on the increase.

Fresh From Japan.
Sound Bulbs of
Lil. Auratum, 7 to 9 inch, $9.00 per 100.
Lil. Rubrum, 7 to 9 inch, $9.00 per 100.
Import prices on first class Fall Bulbs way down
W. W. BARNARD & CO.,
6 and 8 N. Clark St. CHICAGO.

G. J. MOFFATT,
Manufacturer of
PAPER BAGS AND ENVELOPES
Special attention given to
Seed Bags and Catalogue Envelopes.
NEW HAVEN, CONN.
Mention American Florist.

FINEST QUALITY. **BULBS FOR DEALERS** LOWEST PRICES.

	Per 100.	Per 1,000
Lilium Auratum, 7x9	$ 7.50	$ 70.00
" Speciosum Album, 8x10	12.00	100.00
" " Rubrum, 9x11	8.00	75.00
" " Roseum 9x11	8.00	75.00
" Krameri	7.50	70.00
" Tigrinum Splendens, 9x11	9.00	85.00
Gladiolus, red and scarlet mixed	1.00	7.50
" all colors	1.25	10.00

	Per 100.	Per 1,000
Gladiolus, all colors, extra mixed	1.50	12.00
" pink shades, mixed	1.75	15.00
" all light colors (no red)	1.75	15.00
" yellow mixture	2.25	20.00
" the "Bride" (white)	1.00	8.00
Caladium, extra large bulbs	10.00	
" medium bulbs	7.00	
" small bulbs	4.00	

Address

Z. DE FOREST ELY & CO.
WHOLESALE IMPORTERS AND GROWERS
BULBS AND SEEDS
1024 MARKET ST. PHILADELPHIA, PA.

VAN ZANTEN BROTHERS,
HILLEGOM, HOLLAND,
GROWERS AND EXPORTERS OF
DUTCH AND FOREIGN
Bulbs and Plants
ASK FOR WHOLESALE PRICE LIST.

GT. VAN WAVEREN & KRUYFF,
Special Growers of
Dutch Bulbs and Flower Roots.
Mr. Gerard Kruyff has come personally to make a trip through the United States, to contract with buyers, and offers a large stock of first quality goods. Parties interested in the Bulb trade are requested to correspond. Send lists for estimates to
Gerard Kruyff,
ASHLAND HOUSE, FOURTH AVE., NEW YORK CITY.

R. VAN DER SCHOOT & SON,
HILLEGOM, - HOLLAND,
Largest Growers of
HYACINTHS, TULIPS, NARCISSUS, SPIRÆA, LILIES OF THE VALLEY, ETC.
HEADQUARTERS FOR HIGH GRADE FORCING BULBS.
Wholesale Importers should write us for Prices.
OUR NEW TRADE LIST NOW READY.

Send for Catalogue of
JAPAN BULBS, SEEDS, AND SHRUBS.
ARAUCARIAS,
AUSTRALIAN Palm Seeds,
CALIFORNIA BULBS AND SEEDS to
H. H. BERGER & CO.
ESTABLISHED 1878. SAN FRANCISCO, CAL.

TUBEROSES.

	Per 100	Per 1,000
☞ We are headquarters.		
1st size Dwarf Pearl	$1.50	$12.00
2d size "	.80	6.50
1st size Tall Pearl	1.20	10.00
Gladioli, extra large, finest sorts	1.25	12.00

H. G. FAUST & CO.,
64 and 66 N. Front St., PHILADELPHIA, PA.
WOODLAWN FARMS, 1,500 ACRES.

BENJAMIN RIMBAUD, BULB GROWER,
Quartier du Temple, Toulon, var, France.
Cable address Benrimbaud, Toulon.
The largest cultures in the South of France, of WHITE ROMAN HYACINTHS, Narcissus Paper White grandiflora, N. Double Roman, N. Double Von Sion, true pure yellow, and other Daffodils Lilium Candidum, the largest bulbs. Freesias. Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A Double Rosette the earliest, etc. Prices on application.

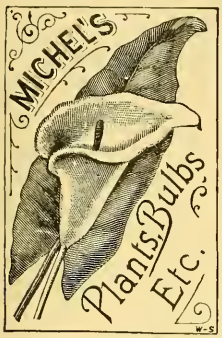
You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

LARGE CONSIGNMENT JAPAN LILY BULBS.

just arrived in splendid condition; buyers of these should note our exceptionally low prices; stock is fine. Auratum is exceedingly scarce; Lilium Lancifolium Roseum and Rubrum, $8.00 per hundred; Lancifolium Album, $12.00 per hundred; Auratum, 7 to 9 inches in circumference, $8.00 per hundred; extra selected bulbs, 10 to 11 inches in circumference, $12.00 per hundred; Lilium Candidum, $1.00 per hundred.

TRADE LIST ON APPLICATION.

F. R. PIERSON COMPANY, TARRYTOWN ON THE HUDSON, NEW YORK.



Mention American Florist.

Write for wholesale list.

MICHEL PLANT AND BULB CO.,
ST. LOUIS, MO.

WE SELL SEEDS

TO FLORISTS AND DEALERS.

WEEBER & DON,

SEED MERCHANTS AND GROWERS,

114 Chambers St., New York.

Catalogues on Application.

ONE MILLION

FREESIA REFRACTA ALBA.

Extra Size–Selected bulbs–delivery August 1893. Large consumers will save money by getting quotations from the largest growers on the Pacific Coast.

Also Headquarters for CALLA BULBS in all sizes. DWARF CALLA "The Gem," L. AURATUM, home grown and Imported Native Bulbs and Tree Seeds, etc.

SHERWOOD HALL NURSERY CO.,
SAN FRANCISCO, CAL.

COLEUS AND GERANIUMS

Cuttings and potted plants.
Wholesale and Retail. . . . .

CHAS. A. BAIRD, Manalapan, Mon. Co., N. J.

Lily of the Valley Bulbs.

THE STAR BRAND
SPECIALLY RECOMMENDED FOR LATE FORCING.

We are now booking Import orders for shipment from Hamburg in October or November.

REISS & BRADY,
280 Washington Street, New York.

Best German Pansies

READY TO BLOOM,

$2.00 per 100; $15.00 per 1.000.

Make money orders payable at Chicago P. O. Address

JOHN P. TONNER. Mont Clare, Ill.

MEXICAN PRIMROSES (Œnothera Roseu), fine plants, per 100, Apple Blossom, $3.00; Hermosa-tinted, $3.00; Cooperia Pedunculata, 1st size, $3.00; 2nd size, $2.50; Cooperia Drummondii (ready in May) $1.50; Zephyranthes Andersonii Texana (May), $1.50; Crinum Zeylanicum, C. Careyanum, C. Sanderianum, C. Latifolium, $2.00 each, $20.00 dozen.

Carriage paid when cash accompanies order.

MISS LIZZIE FREEMAN,
1203 East Ave., AUSTIN, TEXAS.

Always mention the American Florist when writing to advertisers.

HULSEBOSCH BROS.,

BULB AND PLANT GROWERS,

OVERVEEN near Haarlem HOLLAND.

Prices on application for the coming season of

ROMAN HYACINTHS,	PAPER WHITE NARCISSUS,
LILY of the VALLEY,	HARRISII LILIES,
LIL. LONGIFLORUM,	TULIPS,
DUTCH HYACINTHS,	CROCUS,
SPIRAEAS,	ROSES, ETC., ETC.

☞ Spring Catalogue now ready. ADDRESS

A. HULSEBOSCH,

P. O. Box 3118. Warehouse 58 West Street, NEW YORK CITY.

Don't Wait

till the minute you want them, but place your order for

Coleus

NOW. We are sold two weeks ahead of delivery. All the best kinds, including "Sunrise," the new yellow.

Send for list.

ALEX. McBRIDE, Aplaus, N. Y.

—Prices Further Reduced.—

CAPE COD PINK POND LILY.

For price list, Plants and Cut Flowers, address the original cultivators,

CHIPMAN BROS.,
SANDWICH, (Cape Cod), MASS.

ROOTED CUTTINGS.

Marie Louise Violets, healthy stock. Carnations in 2¼ inch pots, Lizzie McGowan, Hinze's White and Portia.

E. P. HOSTETTER, Manheim, Pa.

Kills Mildew and Fungus Growth. What does? GRAPE DUST. Sold by Seedsmen.

LILIUM AURATUM BULBS.

5 to 7 inch at $7 00 per 100.
7 to 9 inch at $15.00 per 100.

WISCONSIN FLOWER EXCHANGE,
131 MASON STREET,
MILWAUKEE, WIS.

Siebrecht & Wadley,

ROSE HILL NURSERIES,

NEW ROCHELLE, N. Y.

Palms, ORCHIDS, Roses, and New Plants.

FRESH DRACAENA CANES NOW READY.

ORCHIDS.

The Finest Stock in the World.

SANDER'S, ST. ALBANS, ENGLAND.

Thirty minutes from London.

Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street New York City

Orchids Cheap as Good Roses.

BRACKENRIDGE & CO.,

Established 1854. Govanstown, Md.

PRICE LIST FREE.

1,000,000 CANE STAKES

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

New Haven, Conn.

The particular feature of the Easter trade this year was the largely increased demand for flowers and plants. The buyers seem to come as much from the middle classes as the upper ten, and even in this home of Congregationalism, Easter is now the recognized flower day of the year. An item to be noticed was the enormous demand for carnations and lilies in pots, the decreased call for callas, and the steadily growing enquiry for all bulbous flowers. Roses and violets were much sought after, but the principal call was for carnations and long stemmed flowers that would keep.

An interesting feature with one of the largest Episcopal churches, was the presentation of 500 small flowering plants, one to each of the Sunday school scholars, and the next autumn having a parish flower show where the children would bring the results of their summer's cultivation and be awarded prizes, in proportion to quality.

With all the florists here the result might be summed up, that the amount of business was all that could possibly be done in the limited time.

ROBERT VEITCH, JR.

Toronto.

Spring is with us at last and nursery stock is being handled pretty lively. With regard to cut flower trade, there are plenty of roses, carnations and lilies coming in, in fact more than can be disposed of at present prices. Bulbous flowers have fallen off since Easter, but I still see plenty of valley in our florists' windows.

I heard from our secretary, Mr. Ewing (who is at present in charge of the Ontario exhibit of plants at the World's Fair), that he had arrived safely in Chicago with the exhibit, and that it was secured all right under the wing of "Uncle John." G. D. M.

15,000 Coleus Cheap.

In order to close out our Coleus we have marked prices down. The quality is as good as the best. Rooted Cuttings, 50c per 100.

Alternantheras rooted in August, now in flats. P. Major, $6.00 per 1,000; A. Nana, $5.00 per 1,000. Plants from 2 inch pots of Coleus or Alternantheras, $2.00 per 100. Moon Vines, 2¼ inch pots, $3.00 per 100.

No order will be filled for less than $2.00. Add 10c per 100 if wanted by mail.

HEITE FLORAL CO.,
712 Linwood Ave. KANSAS CITY, MO.

COLEUS, ROOTED,

Leading varieties, $1 per 100; $8 per 1,000, including the finest yellow Coleus in cultivation; a new variety, equal to Golden Bedder in color, and as good a grower as Verschaffeltii.

—PANSIES—

Fall Seedlings, a splendid strain, $5 a 1,000; 500 at 1,000 rates. 10c per 100 extra where shipped by mail.

JAMES HORAN,
FLORIST, BRIDGEPORT, CT.

COLEUS,

ROOTED CUTTINGS.

80 cents per 100; $6.00 per 1000. 20 Best Bedding Sorts.

Cash with order.

VESEY'S GREENHOUSES,
90 Thompson Avenue. FT. WAYNE, IND.

Mention the American Florist when writing to advertisers on this page.

CROZY CANNAS.

WE ARE HEADQUARTERS for all the Novelties, and in addition control EXCLUSIVELY several grand varieties which we now offer for the *first time*. We will not be undersold on any of the list.

J. C. VAUGHAN,
New York: CHICAGO.
26 Barclay Street. P. O Box 688.

Greenhouses: Western Springs. . . .

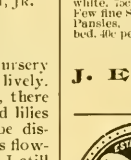
*** Rooted Cuttings. ***

COLEUS FOR YOU ALL!

Golden Bedder and Crimson Verschaffeltii specialties, $6.00 per 1000. Fuchsias, Storm King, Mme. Worth, E. G. Hill, Phenomenal, Jupiter, Black Prince, and others, $1.00 per 100. Ageratums, dwarf, blue and white, 75c per 100. Heliotrope, 4 sorts, $1.00 per 100. Few fine Standard Dwarf, $1.00 per 100, from flats $1.50. Pansies, Hybrid, Butterfly and Trimardeau, seed bed, 40c per 100; transplanted, 60c per hundred.

CASH WITH ORDER.

J. E. FELTHOUSEN,
SCHENECTADY, N. Y.



TRY DREER'S GARDEN SEEDS, Plants, Bulbs & Requisites. They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.

HENRY A. DREER,
Philadelphia, Pa.

STRING

Your Smilax and other trailing plants with

GREEN SILKALINE.

Safe cord can be used with plants when decorating. For samples and prices, address

JOHN C. MEYER & CO.,
289 Devonshire Street, BOSTON, MASS.

CATALOGUE PRINTING. ELECTROTYPING.

Done with expert ability for Florists Nurserymen, Seedsmen. Write to

J. Horace McFarland Co.,
HARRISBURG, PA.

D. H. ROBERTS,
159 & 161 South 5th Ave., New York.
NATURAL GAS MADE GLASS
for Rose Houses, Conservatories, etc., etc.
Our glass received the highest award at the Boston Convention of the S. A. F.

BOUVARDIAS, rooted cuttings, $1.50 per 100. Mme. Crozy Cannas 10 to 15 cts. Write for special low prices for 2 year climbing and moss roses.

McCREA & COLE, Battle Creek, Mich.

GREENHOUSE HEATING.

BY A. B. FOWLER.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.

It is highly commended by Mr. John Thorpe and others. Postpaid, 75c.

Sent on receipt of price. Address,
AMERICAN FLORIST,
CHICAGO.

The Snow Crest Daisy fills the bill;
Test it any way you will;
However you must grow it cold;
Then its mammoth size will hold.

Every florist should invest
In this Daisy; 'tis the best;
For design work so complete
There's really nothing quite so neat.

CUT BLOOMS, $1 PER 100, POST FREE.

Large stock fine plants all in bud and blooming, 15 for $1.00; 100 for $5.00; sample plant and bloom for 12c. Double fringed petunias, Dreer's, mixed, all colors, stock plants, 3-inch, strong, 60c. per doz.; $4 per 100; smaller from flats, $2.50 per 100; rooted cuttings, $1.00, post free. The florist double white forcing Petunia, white as the driven snow, fringed and delicately scented, valuable for cutting, design work, etc., stock plants, $1 per doz.; from flats, $3 a 100; rooted cuttings, $1.50 per 100. Double Golden Marguerites, the genuine dwarf, large flowered, stock plants, 60c per doz., $4 per 100; smaller from flats, $2 per 100; rooted cuttings, $1.10, post free. Double Dahlia Sunflower (Helianthus multiflorus), rooted pips ready for potting, 50c. per doz., $2.50 per 100. French Cannas, Fairmount, Park strain, rots in variety, dry roots ready for potting, 50c. per doz., $3 per 100; large flowered yellow, mixed, plain blotched, striped; these are extra fine showy kinds 60c. per doz. $4 per 100; a few extra fine bronze-leaved kinds, 60c. per doz. Variegated Vincas, field-grown, 3-inch, $5 per 100; small from flats, $2 per 100. Coleus, Fuchsia, Stevia, Alyssum, double and single, Gem, Feverfew and miscellaneous rooted cuttings, $1 per 100, small pits, $2 per 100. Rooted cuttings per 100 and small plants per doz. post free if desired. Safe arrival and satisfaction guaranteed or money refunded.

Address J. C. GIBSON, Woodbury, N. J.

NEW YELLOW CHRYSANTHEMUM

FLORA HARKETT.

A bright canary yellow sport of Lady Lawrence (Syn Robert Bottomly) with the unexcelled habit of the parent and even stouter growth. The finest cut flower of this color we have seen and one of the very best pot plants. Fine 3 inch pot plants $3.00 per dozen. $20.00 per 100. Also several thousand plants of the best varieties recently introduced, and a few of the older standard sorts at low rates.

Harkett's Floral Nursery,
DUBUQUE, IOWA.

Tuberous Begonias.

Seedling Plants Now Ready.

Best Single or Double ones, colors mixed, mailed at $3.00 per 100. A different strain at $2.50, single only. We have a few good sound tubers left. Write us if you want any.

BRAUER & RICHTER
. . MCCONNELSVILLE, O.

MAMMOTH PANSIES.

First size in bloom, $3.00 per 100.
Second size in bloom, $2.00 per 100.
Third size in bud, $1.50 per 100.
Ampelopsis Veitchii, 3½ inch pots, $6.00 per 100.
Ampelopsis Veitchii 5 inch $9.00 per 100.
Chrysanthemums, 2½ inch $4.00 per 100.

Address—
J. G. BURROW, Fishkill, N. Y.

Maianthemum Bifolium—clustered white flowers and deep green leaves—very effective for decorative work. $4.75 per 100. Euphorbia Corollata—a fine forcing plant, $2.00 per 100. Phlox Subulata—for bedding, $2.00 per 100. Osmunda, $2.00 per barrel. Trillium Grandiflorum Maximum, $5.00 per 100.

W. A. BROTHERTON & CO.,
ROCHESTER, MICH.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

For the Present Wedding Season

ASPARAGUS * PLUMOSUS * NANUS

Indispensable for First Class Decorative Work.

Keeps Better and Looks Well Longer than any other Green.

It is not expensive when the length of strings is considered. It can be shipped long distances without injury, and the supply can be depended upon.

We can furnish it in Any Quantity all the year round.

The Largest Stock in the Country of this Grandest of all Decorative Vines.

Strings 6 to 10 Feet Long, 50C.

Strings 12 to 18 Feet Long, $1.00.

Address by Mail or Telegraph—

WM. H. ELLIOTT,

BRIGHTON, MASS.

Bethlehem, Pa.

Easter week opened bright and clear, and remained so, hurrying on all lagging Easter stuff, and encouraging visitors. This has been a phenomenal Easter, after our hard winter. We had made extensive preparations to supply the demand for cut flowers and plants, but it exceeded our utmost expections, and went very far towards lightening our very heavy coal bill. The demand seems to run more towards plants in pots for window and cemetery decoration, as hydrangeas, hyacinths, tulips, genista, azaleas, narcissus, lily of the valley and Harrisii lilies; and even geraniums were eagerly seized upon when other stock ran short. Cut flowers of tulips, hyacinths, narcissus, roses, lilies, and carnations were in large demand, arranged loose and for mailing. Formally arranged pieces were not in it, which is quite a revolution from former Easters. Altogether it has been the best Easter in our experience, sales averaging 15 per cent. higher than last year, and the outlook for spring plant trade is very promising.

Milwaukee, Wis.

Easter trade was larger than common with an especially heavy call for lilies in pots. The trade Friday and Saturday could hardly be handled in some of the stores. Those who had provided any considerable stock of cut lilies only just sold out. The demand for roses was light Friday but on Saturday and Sunday they sold out quite well, which was probably due to the fact that no more lily plants were to be had. Harrisii took the lead but auratum and lancifolium met with favor. It seems advisable for Milwaukee florists to look upon Easter as "lily day" and arrange accordingly. One firm prepared a number of nests of colored eggs arranged with flowers and they sold exceedingly well.

Cincinnati.

Easter trade in this city was far in the lead this year. Of the many florists all make the same report: "Better than we ever had before, and especially in plants." Roses were very scarce and quality not extra, still they were roses and as such sold rapidly. The poor old tulip met with the same fate here as in our sister cities. Everything else sold well. Trade at present is only fair and the commission houses now have a grand display of stock. E. G. GILLETT.

Association "Flora"

BOSKOOP, HOLLAND.

Now on hand in New York:
CLEMATIS, 3 Years, per 100, $30.00
H. P. ROSES, for forcing, " 9.00

In the best variety, as Alfred Colomb, Anna de Dieshach, B. Rothschild, Fisher Holmes, Gen. Jack, La France, Mme. G. Luizet, Mme. Plantier, Magna Charta, Paul Neyron, P. C. de Rohan, Merville de Lyon, Perle des Blanches, Ulrich Brunner and other sorts. Azaleas, Rhododendrons, Spiræas, etc. We also have Palms, Dracænas, Araucarias and Bay Trees at our nurseries in Holland. Catalogue on application.

P. OUWERKERK, 206 Cambridge Ave., JERSEY CITY, N. J.

MAGNOLIAS

OBOVATA GRACILIS AND PURPUREA.

Fine, bushy plants, 3 to 8 feet, from $25.00 to $200.00 per 100.

Send for descriptive catalogue and wholesale price list free to all in the trade.

SAMUEL C. MOON, MORRISVILLE, Bucks Co., PA.

The three leading Florist Flowers:

CHRYSANTHEMUMS, CARNATIONS AND ROSES.

ALL THE NEW AND SELECTED STANDARD VARIETIES. . . .

My stock of all are as fine as can be produced at reasonable rates. Complete list of these will be mailed to all applicants in the trade.

JOHN N. MAY, Summit, N. J.

Mention American Florist.

CHRYSANTHEMUMS.

NOVELTIES AND STANDARD VARIETIES.

Lowest price on application.

NATHAN SMITH & SON,

167 W. Maumee Street, ADRIAN, MICH.

Established Orchids.

CATTLEYA TRIANÆ, fine selected stock, well established in 6 inch pots, and will produce four to eight flowers each next winter. Many of them are very choice varieties. Single plants, $2.50, twelve for $25, one hundred for $175. CATT. GASKELLIANA, extra well furnished plants in fine condition, and will produce in June next 6 to 10 flowers each. Single plants, $2.50, twelve for $25. CATT. MOSSIÆ, the finest cattleya for color and size yet introduced. Splendid plants, well furnished with flower sheaths and will produce 6 to 10 flowers each plant in May. $8 each or $30 per dozen. A large consignment of EAST INDIAN ORCHIDS will shortly arrive. Among them will be a grand lot of Cypripedium Insigne, collected in the original district from which all the choicest varieties have come. Also Dendrobium Nobile, Dendrobium Farmerii, Dendrobium Chrysotoxum, Dendrobium, Thyrsiflorum, Dendrobium Aureum, Dendrobium Densiflorum, Dendrobium Devonianum, Dendrobium Cambridgeanum and other choice species. Particulars later.

IG. FORSTERMAN, NEWTOWN, N. Y.

Rooted Cuttings

of Evergreens, Hardy Flowering Shrubs and Hardy Perennials (Achillea, iberis, etc.) raised on contract for spring delivery. SEND LIST OF WANTS.

. . . ISAAC C. ROGERS, MOORESTOWN, N. J.

FOR SALE.

Extra fine Marie Louise Violet Clumps free from disease, 10 to 20 runners can be taken from each clump. Let me book your order now for them; price only $5.00 cash per 100 for delivery after April 1st. Be quick and speak quick.

E. KOFFMAN, Walden, Orange Co., N. Y.

When writing mention the AMERICAN FLORIST.

DO YOU WANT ANY?

	Per 100.	Per 1000.
Ivies English, one year old	$5 00	$40 00
Alternanthera, red or yellow	3 00	25 00
Echeveria Glauca, 2-2½-inch diam.	3 00	25 00
Daisies, hardy red or white	3 00	25 00
Pansies, strong plants, good strain	3 00	25 00
Coleus, rooted Golden Bedder and Verschaffeltii	1 00	7 50

Sweet Pea seed, our own growing, finest varieties mixed 65c. per pound. (Cash must accompany all orders.)

JOHN RECK, Bridgeport, Conn.

FOR SALE. 10,000

Rooted Cuttings of Alternanthera

P. major and A. nana, 90c. per 100; $7.00 per 1000. Fine stock.

C. K. HOFFMEYER, Mansfield Valley, Pa.

Cyclamens.

	Doz.	Hundred.
Select strains, in 3½-in pots	$1.00	$8.00
H. P. Roses, Select named kinds	1.50	10.00
Smilax, stocky, well-hardened Seedlings, per thousand	6.00	.75

CLEMATIS.

Strong 2 and 3 year plants, own growing, leading kinds, $3.00 and $4.00 per dozen.

F. A. BALLER, BLOOMINGTON, ILL.

GOLDEN WEDDING.

Single Plants, 25c. each; 12 Plants, $2.50; 50 Plants, $8.00.

CHRYSANTHEMUMS.

Discard old unsalable varieties; freshen your stock with the best new and recent prize winners. Strong healthy plants (*not rooted cuttings*), your selection, 100 plants, 20 kinds, 5 of each, $3.50; expressed post free, $4.00. 200 plants, 40 kinds, 5 of each, $7.00; post free, $8.00. 100 varieties, my selection, all different, $2.00; post free, $2.25. Cash with order.

A. Le Roy, Col. W. B. Smith, Chicago, Ed. Hatch, E. Hoyt, H. F. Spaulding, H. May, H. Balsley, Hicks Arnold, J. H. White, L. Russell, Mrs. J. Jones, Mrs. J. W. Morrissey, Mrs. Gov. Fifer, W. S. Kimball, Roslyn, R. Cleveland, Superior, Secy. Farson, Shenandoah, A. H. Neve, Mattie Stewart, R. George, G. H. DePau, Capt. Crosby, Etoile de Lyons, Ava Spaulding, A. McNally, Jessica, L. B. Bird, I. McDonald, E. Pruss, L. Canning, C. J. Osborn, E. G. Hill, Mrs. Dreer, Violet, Rose, Sugar Loaf, Gloriosum.

T. H. SPAULDING, Orange, N. J.

VERBENAS,

$20.00 per 1,000.
2.50 per 100.

Alternantheras, $25.00 per 1,000; $3.00 per 100.
Coleus, Centaurea, Alyssum, $2.50 per 100.
Pelargonium, F. Dorner, fine stock, $10.00 per 100.
Roses, fine stock leading forcing varieties.

JOSEPH HEINL, Jacksonville, Ill.

Mention American Florist

STRONG PLANTS OF CARNATIONS.

Floe stock, ready now. Special prices on large lots. Terms, cash with order.

	Per 100 Root'd Cutt'gs	Per 100 Strong Plants
Daybreak, flesh pink	$ 3.00	$ 6.00
Tidal Wave, carmine	2.00	4.00
Grace Wilder, bright pink	1.50	4.00
Silver Spray, white	2.00	4.00
Hector, scarlet	2.00	4.00
Buttercup, good yellow	4.00	6.00
Lizzie McGowan, white	2.00	4.00
Crimson Coronet	3.00	6.00
J. J. Harrison, variegated	2.00	4.00
Ferdinand Mangold, crimson	3.00	6.00
Golden Triumph, light yellow	4.00	6.00
Fred Dorner, scarlet	3.00	6.00
Nellie Lewis, variegated	2.00	4.00
Portia, scarlet	1.50	3.00
Ben Hur, clear pink	4.00	6.00
White Dove, pure white	3.00	5.00
Nancy Hanks, clear pink	4.00	6.00
Aurora, bright pink	3.00	6.00
Prest. Garfield, scarlet	1.50	4.00
Emily Pierson, scarlet	4.00	6.00
Peacblow Coronet, blotched	3.00	5.00
Puritan, white	3.00	5.00
Wm. Scott, clear pink	10.00	15.00
Mad. Albertini, light pink	10.00	15.00
Mrs. E. Reynolds, bright pink	10.00	15.00
Richmond, brilliant carmine	10.00	15.00
Blanche, white	10.00	15.00
Edna Craig, clear pink	12.00	15.00
New Jersey, scarlet	12.00	15.00
Ida McKinley, salmon pink	10.00	12.00

GEORGE HANCOCK, Grand Haven, Mich

CARNATIONS

ROOTED CUTTINGS.

Puritan, Aurora, Golden Triumph, Grace Darling, Daybreak, Pearl, White Wings, Lizzie McGowan, Louise Porsch, W. F. Dreer, J. R. Freeman,

and many other varieties; fine, healthy stock, ready January and after.

HYBRID PERPETUAL ROSES

500 Paul Neyron, strong plants....$10.00 per 100.
20 other leading varieties ..... 10.00 per 100.
$90.00 per 1,000.

☞Send for price list.

WOOD BROTHERS,
Fishkill, N. Y.

W. R. SHELMIRE,

Carnation Grower

AVONDALE, CHESTER CO., PA.

Send for price list of Rooted Cuttings.

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

CARNATIONS

ROOTED CUTTINGS.

Send for Price List of all the leading varieties.

WM. SWAYNE,
P. O Box 226. KENNETT SQUARE, Chester Co., Pa.

GRACE BATTLES

and over 60 other varieties of

CARNATIONS

offered the Wholesale Trade.

My list embraces the best Standard and New kinds, including some of particular interest to growers of seedlings. Correspondence and personal inspection solicited. **C. J. PENNOCK,**

The Pines. Kennett Square, Chester Co., Pa.

Carnation Cuttings.

Healthy stock, well rooted, ready to ship now.

Hinze's White	per 100,	$1.25;	per 1000,	$10.00
Grace Wilder	"	1.50;	"	12.50
Portia	"	1.50;	"	12.50
Anna Webb	"	2.00;	"	15.00
Lizzie McGowan	"	2.00;	"	15.00
W. F. Dreer	"	2.50;		

THOMAS DeWITT,
(Successor to DeWitt Bros.) **BRISTOL, PA.**

Mention American Florist.

Orders Booked Now for My Specialties

FOR 1893.

New Jersey.—A scarlet Carnation hard to beat.....$12.00 per 100

Old Rose—Old rose pink Carnation .....$12.00 per 100

Nellie Bowden.—Pure bright yellow Canna.....$60.00 per 100

READY IN FEBRUARY.

Other varieties of Carnations, both old and new

JOHN McGOWAN,
• • • • • • ORANGE, N. J.

CUTTINGS

Carnations- Lizzie McGowan, Grace Darling and Aurora.
French Canna—A fine assortment of the best varieties only at $1.50 per 100, or $35.00 per 1000.
Seedling Ver ena, Mammoth Strain—Select and finest colors, good stocky plants at $1.00 per 100.

Terms Cash. Correspondence Solicited.

ALBERT M. HERR, Lock Box 496. **Lancaster, Pa.**

SEE OUR PRICE LIST

in special carnation number of Jan. 19th, or address

EDW. SWAYNE, Carnationist,
. . . Kennett Square, Pa.

Rooted Carnation Cuttings.

WHOLESALE PRICE LIST NOW READY,

Containing a full list of best new and old sorts, including the Prize takers at MADISON SQUARE and PHILADELPHIA.

Address **H. E. CHITTY, Paterson, N. J.**

ADVERTISEMENTS

• • • SOLICITED • • •

For the annual report of the American Carnation Society.

C. J. PENNOCK, Secretary,
KENNETT SQUARE, Chester Co., Pa.

ROOTED CUTTINGS

Of the Best Old and Most Promising new varieties of

CARNATIONS.

Write for a catalogue and send list of wants for an estimate.

J. J. Styer,
CONCORDVILLE, PA.

ROOTED CUTTINGS

GOOD ONES.

Verbenas, 22 varieties	per 1000, $8.00, per 100,	$ .90
Coleus, 12 varieties	"	1.00
Double Alyssum	"	.75
Chrysanthemums, 40 varieties	per doz.	.20
Fuchsias, 10 varieties	"	.20
Heliotrope, 4 varieties	"	.20
Cigar Plant	"	.20
Manettia Vine and Mexican Primrose	"	.25

I. L. PILLSBURY, Macomb, Ill.

ROOTED CUTTINGS of CARNATIONS

By the Wholesale.

Ready now. This is the best time for intending buyers to supply themselves. offer them at moderate prices. Send for Price List. Address

JOSEPH RENARD, Unionville, Chester Co., Pa.

25,000 Carnations.

ROOTED CUTTINGS AND PLANTS.

WILDER, PURITAN, McGOWAN, PORTIA, Fisher and others.
ROSES—Leading varieties. Best strains seed for Florists and Market Gardeners.

Price List Free.

C. E. ALLEN, Brattleboro, Vt.

Mention American Florist.

"CHRYS-COLA"

ROOTED COLEUS

Verschaffeltii, J. Goode, Golden Verschaffeltii, Yeddo, Firebrand, Chicago Bedder, Chapmani.

75c. per 100, $6.00 per 1000.

Cash with order.

S. B. FIELD, Roselle, N. J.

E. G. HILL & CO.,

Wholesale Florists,

RICHMOND, INDIANA.

Marie Louise Violets.

The Anchorage Rose Co. offers 50,000 Marie Louise Violets, well established in 2½ inch pots, absolutely free from disease, $25.00 per 1,000. First come first served.

Anchorage Rose Co.,
ANCHORAGE, KY

25,000 PANSIES The Jennings strain; extra fine plants in bud and bloom, **$2.00 per 100.** Medium size plants, will flower soon, **$1.00 per 100; $9.00 per 1,000.** Extra small plants, September sowing, **60 cts. per 100** by mail; **$5.00 per 1,000;** extra fine for late blooming,

E. B. JENNINGS, Pansy Grower,
Lock Box 254. **SOUTHPORT, CONN**

Worcester, Mass.

Trade has been running very steadily since Easter; extra good stuff is plentiful and prices remain firm. Everybody is busy just now cleaning up after the rush and bustle of Easter week.

The monthly exhibition of the Horticultural Society was held Thursday, April 13, and though the number of exhibitors was not large, the quality of the stuff shown was very good.

For twenty vases of cut blooms, H. F. A. Lange was awarded first for a splendid collection, among which were some handsome Jacqs, Magnas and Brunners. Mrs. C. E. Brooks also had a fine display which received second premium.

The baskets of cut flowers were exceptionally fine and attracted much attention; a splendid arrangement of Jacqs and Murillo tulips captured first. Mrs. F. A. Blake secured second for a very handsome effect in Perles, pink carnations, Harrisiis and adiantum. The handle was looped with Asparagus plumosus and Lapageria rosea. H. A. Jones and H. B. Watts also exhibited nice arrangements.

In hyacinths in pots competition was slack and quality of blooms only fair. Lange, first, H. A. Jones, second. Not much more could be said of the tulips in pans. H. F. A. Lange, first, Mrs. Edward Hall, second.

The zonale geranium plants were rather good specimens and splendid varieties. M. F. Brierly first, T. H. Record second, H. A. Jones third.

Rea Bros., Norwood, Mass., showed two vases of Astilbe Jap. grandiflora that were very fine.

The next show of the Society is scheduled for May 11. SEEDLING.

State Flowers.

I would like any information the readers of the FLORIST will kindly give me regarding state flowers—that is, which states have adopted flowers, and what flowers have been adopted. The ladies of Wisconsin are now voting on a state flower and wish to avoid selecting a flower already adopted by some other state. C. B. WHITNALL.

Milwaukee, Wis.

ROOTED CUTTINGS.

Alternanthera, Versicolor, Tricolor and Aurea Nana	per 100	.50
Alternantheras Paronychioides	"	.75
Coleus, best old and new	"	$1.00
Fuchsia, leading varieties	"	1.50
Heliotrope, leading varieties	"	1.50
Mexican Primrose	"	1.50
Parlor Ivy, variegated	"	1.50

PLANTS.

Anthericum Picturatum	per doz.	$1.00
Fuchsia, Trailing Queen	"	.75
Begonia assorted	per 100	4.00
Coleus, assorted	"	3.00
Chrysanthemums, leading kinds, our selection	"	3.00
Heliotrope, assorted	"	3.00
Petunias, double, assorted	"	4.00
Anthemus Tinctoria, a good bloomer	"	4.00
Anthemus Coronaria	"	4.00
Solanum Jasminoides Grandiflora	"	4.00
" Jasminoides var	"	5.00
Var. Parlor Ivy	"	4.00
Fuchsia, best varieties	"	3.00
" Storm King and Phenomenal	"	4.00
Echeveria Glauca	"	4.00
" Extensa Globosa, for centers, plants six inches across	each,	.25

Price List on Application.

ROBT. S. BROWN & SONS,

Box 99, Kansas City, Mo.

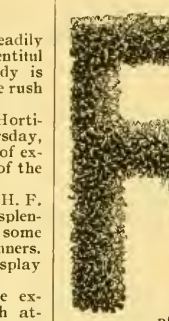
HEADQUARTERS FOR WATER-LILIES

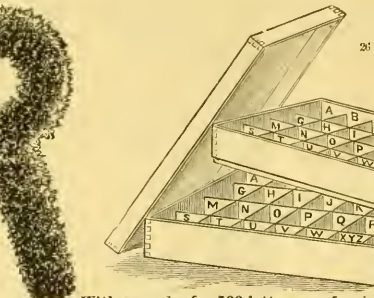
SEED TUBERS AND PLANTS.

Place your orders early if you wish to secure good stock of charming yellow Water Lily, N. Chromatella plants. 1st size, $1.00 each, $10 doz.; 2d size, 75c each, $8.00 per doz. Also, the new French and other new hardy varieties. Send for price list.

Wm. Tricker, DONGAN HILLS, NEW YORK.

Mention American Florist.





Dimensions of this Box:
26 inches long by 18 inches wide and 12 inches high.
Two sections.

With an order for 500 letters, we furnish a box made of wood, nicely stained and varnished, such as is represented in the cut.

BOSTON FLORIST LETTER CO.

Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1½-in. and 2-in. 2.00 per 100. Patent fastener with each letter.

OUR NEW SCRIPT LETTER, $4.00 per 100.

N. F. McCARTHY, Treas. & Mangr. | Address 13 Green St., Boston, Mass.

Address all correspondence to 1 Music Hall Place.

We have a new FASTENER which we consider a decided success. Any customers having old style fasteners which they wish to exchange, can do so without additional cost by writing us.

AGENTS.

Marschuetz & Co., 25 N. 4th St., Phila., Pa.
A. Roiker & Sons, New York.
F. E. McAllister, 22 Dey St., New York.
A. D. Perry & Co., 33 Warren St., Syracuse, New York.
E. Kauffman, Philadelphia, Pa.
H. Bayersdorfer & Co., Philadelphia, Pa.
A. C. Kendal, 115 Ontario St., Cleveland, O.
J. A. Simmers, Toronto, Ont. Agent for Canada.
E. H. Hunt, 79 Lake St., Chicago, Ill.
Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.
H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O
T. W. Wood & Sons, 6th and Marshall Sts. Richmond, Va.
Jas. Vick's Sons, Rochester, N. Y.
C. A. Kuehn, 1122 Pine St., St. Louis, Mo.
D. B. Long, Buffalo, New York.

These Letters are handled by all the Wholesalers in Boston.

WHERE? OH WHERE?

Can I get GOOD Hardy Ferns this spring and for Memorial Day?

Well, we know of but one place and that is at

H. E. HARTFORD'S,

Also Bouquet Green, Laurel Festooning, Decorative Goods, etc., etc.

18 CHAPMAN PLACE, BOSTON.

100,000 VERBENAS.

THE CHOICEST VARIETIES IN CULTIVATION.

Fine pot plants, $2.50 per 100; $20 00 per 1000. Rooted Cuttings, $1 00 per 100; $8 00 per 1000.

NO RUST OR MILDEW.

Packed light, and satisfaction guaranteed. Send for circular. . . .

Our sales reached nearly 250,000 last year, and we can assure our customers that our plants are fully equal, and assortment of varieties surpass those of last year.

J. L. DILLON, Bloomsburg, Pa.

ROSES AND CARNATIONS.

The Largest and Finest Stock in the Northwest ever offered at the following prices:

ROSES—Perles, Hoste, Sunset, La France, Mermet, Bride, C. Soupert, Niphetos, from 2½-inch pots, $4.00 per 100
Mme. Watteville, Albany, Pierre Guillot, Meteor, from 2½-inch pots 5.00 per 100
American Beauty, from 2½-inch pots 7.00 per 100

CARNATIONS—Silver Spray, Lizzie McGowan, Hinze's White, Hector, Portia, Garfield, Grace Wilder, Fred. Creighton, Mrs. E. G. Hill, from 2-inch pots 3.00 per 100
Rooted Cuttings of all varieties offered 2.00 per 100

Cut Flowers, Roses, Carnations Lilium Harrisii and Smilax at lowest market prices. Telegraph orders promptly attended to. CHRIST HANSEN, Wholesale Florist, ST. PAUL, MINN.

GOODYEAR RUBBER CO.

ALL KINDS RUBBER GOODS.

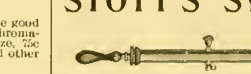
We make a SPECIALTY in GARDEN HOSE, in both Rubber and Cotton.

A GREAT VARIETY OF HOSE REELS, SPRAY PIPES, SPRINKLERS, ETC.

141 Lake Street, CHICAGO.

Mention American Florist.

STOTT'S SYRINGE.



Read advertisement in next week's issue

U. S. AND FOREIGN PATENTS Trade Marks, Designs, Opinions, Searches, &c., promptly attended to. Send sketch or model for free examination as to patentability. All work strictly confidential.

GEO. H. CHANDLEE, Atlantic Building, WASHINGTON D. C.

Mention American Florist

How to Grow Cut Flowers.

By M. A. HUNT.

A PRACTICAL TREATISE ON

THE CULTIVATION OF THE ROSE,

CARNATION, CHRYSANTHEMUM,

AND OTHER FLOWERING PLANTS FOR

.. CUT FLOWERS ..

Also, GREENHOUSE CONSTRUCTION, Illustrated. Handsomely bound in Cloth, and sent to any address upon receipt of $2.00.

M. A. HUNT, Terre Haute, Ind.

CUTS!

Wood Engraving,
Zinc Etching,
Half-Tone,
Wax Engraving, Photo-Engraving,
Designing.

MANZ & CO.,
183 Monroe Street, CHICAGO. ENGRAVERS.

STANDARD HOSE MENDER.

The only Mender using ordinary galvanized wire No. 14, instead of expensive bands. Any person can handle it with perfect ease. Thousands in use and all testify to its Wonderful Merits.

Sample Box, by Mail, 50 cts.

E. HIPPARD, Youngstown, Ohio.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

Clear Cypress, from bottom gutter up is my specialty.

Lyman Felheim,
ERIE, PA.

Mention American Florist.

THE "LOCKLAND" Sash Bars

ARE ALWAYS SATISFACTORY.

This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.

GUTTER MATERIAL, RIDGES, SASH, ETC.

The finest CLEAR CYPRESS used.

Write for circulars and estimates. . . .

LOCKLAND LUMBER CO.

Lockland, O.

SMITH & WEBSTER,

MAKERS OF

GREENHOUSE PIPE

FOR HOT WATER AND STEAM,

193 Lake Street, - CHICAGO, ILL.

Mention American Florist.

J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS •

Greenhouse Material,

LOUISVILLE, KY.

THE PERFECT DRAINAGE

BENCH TILE

For circulars, etc., address

W. P. Wight, Upland Green Houses,

Send your business card. MADISON, N. J.

Ice Boxes

FOR FLORISTS.

All sizes and styles. Correspondence solicited.

KANKAKEE MFG. CO., Kankakee, Ill.
CHICAGO OFFICE: 266-268 Wabash Ave.

Denver.

Easter made us all glad. We had all we could do and prices were such that the winter coal bills will be safely disposed of.

Some of the differences between the growers and retailers have been settled and every department of the business has been strengthened by the reorganization of the Denver Florist Club. The officers elect are H. H. Given, Pres.; John Berry, Vice-Pres.; Albert Mauff, Treas.; J. F. Kemp, Sec'v.; Lyle Waterbury, Cor. Sec'y.; John Davis, Ed. Johnson, Chas. Newlander, Trustees; A. Lange, Seargeant-at-arms. The club is some 65 strong, and the members are all active.

New stretches of glass are seen very often. Mrs. Mauff, with Albert Mauff, are building a model place of seven houses, 125 feet long. This will be strictly a wholesale place. They will still continue the old stand.

Rolan & Newlander are able to attend to their large mountain trade in good shape since they moved into their new addition.

A peculiar thing is true of all the new houses here. All are north and south, equal span. Our sun shines all day, and we need the shade of the sash bars to help keep the temperature down.

LYLE.

MEADVILLE, PA.—Easter trade was excellent, showing a decided advance over any previous year. On April 15 we had snow six inches deep here.

TO TAKE PLACE OF WIND MILLS

A Windmill

Is unreliable because it depends upon the elements for its power; hydraulic rams also depend upon favorable conditions and waste as much water as they secure. Steam pumps require skill and hand pumps demand labor and time. The

DE LAMATER-RIDER OR DE LAMATER-ERICSSON Hot-Air Pumping Engines

are especially designed for pumping water, and from shallow streams or any kind of well. They are simple, safe and reliable, require no steam and have no valves. They require very little heat to operate them, and can be arranged for any kind of fuel.

HOT AIR PUMPING ENGINES

Send for illustrated catalogue to

THE DE LAMATER IRON WORKS,
24-26 Cortlandt Street,
NEW YORK, N. Y.

PLANT BED CLOTH.

CHEAP SUBSTITUTE FOR GLASS on Hot beds, Cold Frames, etc. Three grades.

Light, Medium, Heavy.

Used by Florists, Gardeners, etc., Invaluable for Tobacco Growers. Protects from frost. Promotes hardy, vigorous growth and keeps beds warm; will not shrink or mildew. For sale by the leading Dry Goods houses, Seedsmen, Florists, etc. Well known and extensively used. For circulars and samples apply

NATIONAL WATERPROOF FIBRE CO.,
50 South Street, - - NEW YORK.
Agents Wanted.

When writing to any of the advertisers on this page please mention the American Florist.

"Standard" Flower Pots.

As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address

The Whilldin Pottery Company,

BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.

Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.

A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.

We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.

SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY,
Manufacturing the
ELVERSON, SHERWOOD & BARKER
STANDARD FLOWER POTS.

Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bud Pots, etc.

ADDRESS: PITTSBURGH CLAY MF'G CO., New Brighton, Pa.

H. M. HOOKER COMPANY,
57 and 59 W. Randolph Street, CHICAGO,
NATURAL GAS MADE GLASS
FOR GREENHOUSES.

Write for latest prices.

ESTABLISHED 1866.
FLORISTS WIRE DESIGNS
MANUFACTURED BY
N. STEFFENS
335 EAST 21ST ST. NEW YORK.

GLASS

which is absolutely perfect for modern greenhouse construction.

ROCK BOTTOM PRICES.

Send for Estimate. Satisfaction Guaranteed

REED GLASS CO.

65 WARREN STREET and
46, 48, & 50 COLLEGE PLACE,
—NEW YORK CITY.—

THE BEST POTS.
THE CHEAPEST.
THE LOWEST FREIGHT RATES.
THE BEST OF PACKING.
THE LARGEST POTTERY IN THE STATE
FOR MAKING STANDARD FLOWER POTS.

PRICE LIST OF POTS.

	Per 1000		Per 100
2 Inch	$ 3.25	6 Inch	$ 2.20
2¼ "	3.50	7 "	3.50
2½ "	4.00	8 "	5.00
3 "	5.00	9 "	7.50
3½ "	7.25	10 "	10.00
4 "	9.00	11 "	15.00
5 "	13.80	12 "	20.00

Terms: Cash, free on board cars here. Address

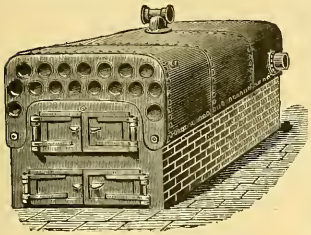
HILFINGER BROS., Potters.
FORT EDWARD, N. Y.

ESTABLISHED 1854.

DEVINE'S BOILER WORKS.

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers

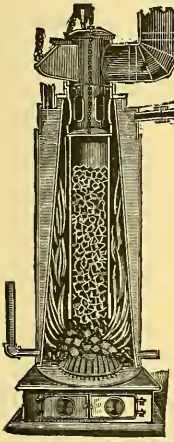


Capacity from 350 to 10,000 feet of four-inch pipe.
SEND FOR NEW LIST.

FRANK DAN BLISH, Att'y,

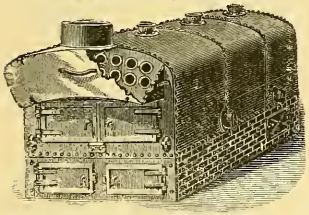
OFFICE, 189 STATE STREET.
WORKS, 56th & WALLACE STREETS.
CHICAGO.

Mention American Florist.



THE WILKS HEATER,
FOR HEATING
GREENHOUSES, STORES, DWELLINGS, ETC.
Manufactured by THE S. WILKS MF'G CO. 123 S. Clinton St., CHICAGO, ILL.
SEND FOR CATALOGUE.

KROESCHELL BROS.
IMPROVED
Greenhouse Boiler,
41 to 55 Erie St., CHICAGO.

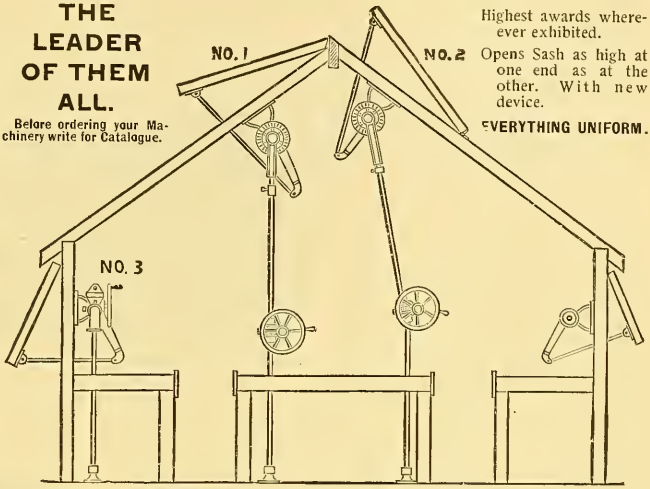


Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around front, sides and back). Write for information.

FLORAL DESIGNS
The Cut Flower Worker's friend. Fine book of 160 pages. Send $3.50 for it, to
J. HORACE McFARLAND, Harrisburg, Pa.

STANDARD VENTILATING MACHINERY,

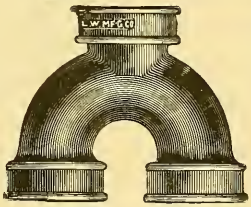
THE LEADER OF THEM ALL.
Before ordering your Machinery write for Catalogue.



Highest awards wherever exhibited.
Opens Sash as high at one end as at the other. With new device.
EVERYTHING UNIFORM.

E. HIPPARD, YOUNGSTOWN, OHIO.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

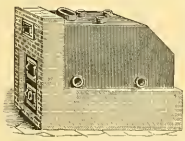
Mention American Florist.

L. WOLFF MFG. CO., 93 to 117 W. Lake Street, CHICAGO.
WRITE FOR ILLUSTRATED CIRCULAR.

Pat. 1882, '85, '86, '88, '90, '91.

FOR WATER, AIR, STEAM, ACIDS, OILS, LIQUORS, GAS, SUCTION,
And for any and every purpose for which a hose can be applied.
Sizes, ½-inch to 42 inches diameter.
The making, vending or use of any Serviceable Armored Wire Bound Hose not of our manufacture is an infringement on one or more of our Patents. The rights secured to us render each individual dealer or user responsible for such unlawful use with all the consequences thereof. For prices and discounts address WATERBURY RUBBER CO., Sole M'f'rs and Owners of all the *Sphincter Grip Armored Hose Patents*, 49 Warren Street, New York.
J. C. VAUGHAN, Agent, CHICAGO.

YOU CAN SAVE MONEY BY PURCHASING. AND GLASS BY USING
HAMILTON'S PATENT SASH LIFTER.
"It works like a charm." So say those who use it. Send us 50 cents for one sample and you will say so too.
BAY STATE HARDWARE CO.
272 Freeport Street, BOSTON, MASS.



GREEN-HOUSE HEATING.
MYERS & CO
1518 & 1520 S. 9th St., PHILADELPHIA.
Send for catalogue and price list.

DO YOU WANT an alphabetical list of the chrysanthemums in America, with class and a brief accurate description of each one, and synonyms noted? You will find such a list in our new trade directory and reference book.

PLEASE WRITE on your printed letter head when addressing our advertisers. If you have no printed letter head, then enclose your business card or bill head.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

Index to Advertisers.

Adv. Rates, etc..... 988
Allan C E..... 995
Anchorage Rose Co. 987 995
Asmus Ernst..... 987
Baird Chas A..... 991
Baker Phebe A..... 988
Baller F A..... 994
Barnard W W & Co... 995
Bay State Hdw Co.... 989
Bayersdorfer H & Co . 989
Berger H H & Co..... 990
Bossill Jos E & Son .. 988
Boston Letter Co 986
Brackenridge & Co.... 991
Brauer & Richter..... 992
Brotherton W A & Co. 992
Brown James, Jr..... 986
Brown R S & Son 996
Brown & Canfield..... 987
Burns & Raynor..... 988
Burrow J G..... 992
Burton John.....986 987
Carman R W..... 986
Carmody J D..... 1000
Chandlee Geo F 996
Chipman Bros..... 991
Chitty H E..... 995
Cliffe David..... 987
Coles W W 987
Cook John..... 987
Corbrey T J & Co..... 989
De Lamater Iron Wks 998
Devine's Boiler Wks.. 994
De Witt Thomas 995
Dillon J L..... 996
Dreer H A..... 992
Elliott W H..... 993
Ellison Wm..... 988
Ely Z De Forest & Co. 990
Engle W J..... 988
Faust H G & Co..... 990
Felheim Lyman..... 992
Feltbousen J E..... 992
Field S B..... 995
Forstermann I..... 994
Freeman Lizzie..... 994
Gibson J C..... 992
Gonzalez & Co..... 986
Goodyear Rubber Co . 996
Hall Ass'n.....1000
Hammond Benj..... 991
Hancock Geo 995
Hansen Christ 994
Harkett W A..... 992
Hart James..... 989
Hart Michael A 989
Hartford H E..... 136
Hetel Jos..... 994
Helte Floral Co..... 992
Henderson John Co... 987
Herr Albert M..... 995
Hews A H & Co 998
Hilfinger Bros..... 988
Hill E G & Co..... 995
Hippard E.....987 995
Hitchings & Co.....1000
Hoffmeyer C K..... 994
Hooker H M Co..... 998
Horan Edw C 989
Horan James..... 992
Hostetter E P..... 991
Huisebosch Bros..... 991
Hunt E H..... 989
Hunt M A..... 997
Hunter & Purdy..... 989
Jennings E B..... 995
Kanokkee Mfg Co..... 997
Kaufmann Ernst & Co 988
Kemble Floral Co 987
Kemlcott Bros..... 989
Koffman E ... 986 988 994
Kroeschell Bros..... 990
Kuehn C A..... 988
La Roche & Stahl..... 986
Lockland Lumber Co.. 997
Lombard R T..... 995
Long Dan'l H..... 989
Lonsdale Edwin..... 989
McCren & Cole..... 992
McBride Alex..... 991
McCarthy N F & Co986 989
McFarland J H..... 990
McFarland J H Co.... 992
McGowan John. 995
Manz J & Co..... 997
Marschuetz & Co..... 988
May John N..... 994
Meyer John C & Co.. 992
Michel Plant & Bulb Co 991
Millang Bros..... 989
Moffatt G J..... 990
Moninger Jno C 1000
Moon Samuel C..... 994
Moon Wm H Co..... 992
Moore Frank L..... 987
Myers & Co 990
Nanz & Neuner..... 987
National Fibre Co 998
Nielson Hans 992
Niles Centre Floral Co 989
Olson M 989
Ouwerkerk P..... 994
Peck & Sutherland.... 989
Pennock C J..... 995
Pennock C J, Sec'y.... 995
Pennock Sam'l S 988
Pierson F R Co. 991
Pillsbury I L 995
Pittsburg Clay Mfg Co 998
Prince A G & Co..... 989
Raoulall A L 989
Reck John 994
Redfield B 986
Reed Glass Co..... 998
Reiss & Brady..... 991
Renard Joseph..... 995
Rimbaud Benj..... 990
Roberts D H..... 992
Roehrs Theo..... 989
Rogers Nurseries..... 994
Rolker A & Sons..... 988
Russell S J..... 989
Sander & Co..... 991
Schnitz Jacob..... 986
Shelmire W R..... 995
Sheridan W F..... 989
Sherwood Hall Nur Co 991
Siebrecht & Wadley... 991
Siptle Doppfel & Co.... 988
Situations, wants..... 986
Smith C A Floral Co.. 986
Smith Nathan & Son.. 994
Smith & Webster..... 997
Spaulding T H..... 994
Spooner Wm H..... 987
Steffens N..... 998
Stott Garden Imp Co.. 996
Struck J N & Bro..... 997
Styer J J 995
Sunderbruch H L..... 989
Swayne Edw 995
Swayne Wm..... 995
Tesson R F 986
Tilton Bros 994
Tonner John P..... 991
Tricker Wm..... 995
Vander Schoot R & Son. 990
Van Zanten Bros 990
Van Waveren & Kruyff... 990
Vaughan J C..... 992
Veseys Greenhouses . 992
Waterbury Rustless Co 993
Weatheredes S 1000
Weeber & Dot 990
Welch Bros..... 989
Whilldin Pot Co 994
Wight W P..... 989
Wilks S Mfg Co..... 998
Winter N D..... 986
Wisconsin Flower Ex. 991
Wolff L Mfg Co..... 993
Wood Bros..... 995

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

CYPRESS GREEN HOUSE MATERIAL

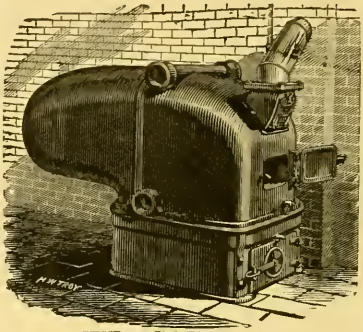
CLEAR CYPRESS SASH BARS

HOT BED AND VENTILATING SASH

JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

GREENHOUSE HEATING AND VENTILATING

Horticultural Architecture and Building.



HITCHINGS & CO.

Established 1844.

233 Mercer St., New York.

FIVE PATTERNS OF BOILERS.

NINTEEN SIZES.

Perfect Sash Raising Apparatus.

Rosehouses, Greenhouses, Etc., of Iron Frame Construction, Erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frame Benches with the "Perfect Drainage Bench Tile" or Slate Top.

SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUE.

WEATHERED'S DOUBLE DOME BOILERS

Are the Very Best.

OUR

Patent Rocking

AND

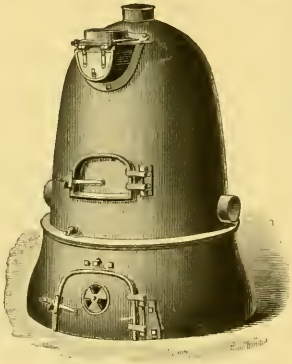
Shaking Grates

ARE

ABSOLUTELY PERFECT,

Being in the smallest sections are the least costly to keep in repair.

Send 3 Cents Postage for CATALOGUE and please mention this paper.



Proven by 40 years USE.

Effective and Durable.

PATENT

Sash Raising Apparatus.

ROSE HOUSES, GREEN HOUSES, ETC.

of Iron Frame Construction, erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frame Benches with Drainage Bench, Tile or Slate.

THOMAS W. WEATHERED'S SONS, (Incorporated) 244 CANAL ST., N. Y.

EVERY BODY TELLS ME,

AND NOW I TELL YOU

THE "NEW DEPARTURE"

Is the BEST and the Cheapest

Ventilating Appliance

That has ever been Introduced for FLORISTS' USE.

See what This man Says about it.

MACOMB, ILL., Feb. 21, 1893.

MR. J. D. CARMODY, *Dear Sir:*

The ventilating apparatus received of you we finished putting up yesterday, and it works fine—I don't know how any one could ask more—as it raises the windows in a 100-foot house easily and evenly. If I had known a ventilating apparatus could be bought for so little money I would have ordered one for the house I built last year; and if I build another next year you can count on an order.

Very respectfully, I. L. PILLSBURY.

J. D. CARMODY, - - Evansville, Indiana.

When writing to any of the advertisers on this page please mention the American Florist.

HAIL

LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.

JOHN G. ESLER, Sec'y F. H. A., Saddle River, N. J.

Gift of the Mass. Agri Col Feb 1893

THE AMERICAN FLORIST

A WEEKLY JOURNAL FOR THE TRADE

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, APRIL 27, 1893.** **No. 256**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company. Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,

322 Dearborn Street, CHICAGO.
Eastern Office: 67 Bromfield St., Boston.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis, Mo., August 9 to 12, 1895.

CONTENTS.

The World's Fair 1001
World's Fair impressions 1001
Forcing houses with short span to the south . 1002
Decorations at inaugural ball (3 illus). 1002
Looking forward 1002
Carnations—seasonable hints. 1004
Chrysanthemum synonyms. 1004
Miscellaneous seasonable hints 1006
Philadelphia 1006
Boston 1006
Washington 1007
New York. 1008
Chicago 1008
Buffalo 1008
St. Louis 1009
Baltimore 1009
News notes 1009
The seed trade 1014
Obituary—Dr. H. W. Williams 1016
Catalogues received 1016
Denver 1018
Milwaukee, Wis 1018
Cut worms in smilax beds 1020
Leaf-rollers 1020
Foreign notes 1022
Cotton plants 1022

BUTLER, PA.—J. W. Bortmas has opened a florist store on Center Ave.

TEWKESBURY, MASS.—Patten & Co. are about to make extensive additions to their glass.

SANTA BARBARA, CAL.—Joseph Sexton has admitted his son as a partner in his nursery business.

SCRANTON, PA.—Wheeler & Redham have moved from Jackson street to 104 South Main avenue.

BETHLEHEM, PA.—George Charman has begun work on the erection of another large greenhouse.

HOLYOKE, MASS.—An interesting address on tuberous begonias and gloxinias was given by Mr. Jos. Aumer at the April meeting of the horticultural society.

MUNCIE, IND.—The Muncie Nursery Co. has been incorporated with a capital stock of $10,000. The officers are A. Lorenze, of Ft. Wayne, president; Evan Weir, vice president; and R. C. Griffith, secretary and treasurer.

The World's Fair.

At the Exposition grounds things are shaping up at a surprisingly rapid rate. Still, in spite of the progress being made all the departments will not be in a finished condition for the opening day, and it is pleasing to note that the Floricultural Division of the Horticultural Department will certainly be the first to be in shape in spite of the many obstacles that have continually hindered the work. No more unfavorable weather could have been devised than that which has prevailed the past month, and as a result the moving of plants has been accomplished only under most unfavorable circumstances. But Uncle John says that he will be all in apple pie order for the opening day, and the wonderful progress made during the past week bears out his assertion.

Last Saturday afternoon there arrived the special train of nine cars containing the exhibit of Pitcher & Manda, Short Hills, N. J. This is the largest single consignment received up to date, and will be an important feature of the display. Mr. Manda is here and is directing the arrangement of the plants. The collection includes 28 varieties of araucarias, 32 varieties of cycads, 17 species of tree ferns, 70 varieties of other ferns, 30 varieties of anthuriums, 10 varieties of pandanus, 1200 orchids in bud and bloom, and 84 varieties of bromeliads, in addition to large collections of palms, dracænas, crotons, begonias, rhododendrons, azaleas, etc. Among the rhododendrons were some specimens eight feet tall. Among the flowering plants was a lot of genistas in fine bloom. The firm will fill one-third of the space around the mound under the dome in addition to a large space in the center of the south curtain. The plants for this latter space were being rapidly placed in position Monday. Two rows of large tree ferns were placed through the center in such a way as to form an alley through which one could walk, while toward the walks on each side were arranged the other decorative plants. At the end was placed a tree fern with a magnificent spread and the fronds beautifully arched. This display will undoubtedly be the largest exhibit of decorative plants by any one firm, and Messrs. Pitcher & Manda are certainly entitled to a great deal of credit for their enterprise, and more plants are to come from them yet, as it was thought best to ship the alocasias, dieffenbachias, caladiums and nepenthes later. The freight charges on the nine cars already here amounted to $3,000.

Mr. Donlan expects another section of the New York state exhibit every day, and when these are in hand the material for the mound under the dome will be complete.

In the north curtain Uncle John has arranged a section of Australia. The big platyceriums that had been cut from the trunks of the trees, with a section of the trunk above and below the plants, have been mounted up in their original position by splicing the section into trees secured here of same sized trunk, and vines planted to run over the trees. So the visitor will see the platyceriums under much the same conditions as did the collector who found them in their native wilds.

Several hanging baskets five feet long and three feet wide and deep have been filled with plants and vines, and will be suspended under the dome. These were made from crates in which plants were shipped to the exposition from Japan, and so Uncle John calls them Japanese hanging baskets. They will be suspended with wire rope hangers.

The Australian tree ferns are growing finely, and will make a much better show at the opening than had been anticipated.

The calceolarias in the greenhouses are now making a grand show, and are attracting crowds of visitors. Last Sunday the visitors to the grounds reached nearly 15,000 persons.

The Japanese garden in the north curtain is now nearly complete, and this display will be a decided feature. It is a complete miniature garden, with walks, bridges, etc., and filled with the curiously trained plants for which Japan is noted.

The exposition grounds are now full of trucks hauling cases of exhibits to the various buildings, and the greatest activity is seen on every hand. The foreigners are here and the scene is decidedly cosmopolitan. In a short walk the visitor passes representatives of nearly all the nations of the earth, each in his or her national costume. The Turks are here in force, as are also the Arabs, Egyptians, Javanese, Eskimos, Ceylonese, etc., in addition to all classes of Europeans, and on the Midway Plaisance the chatter of strange tongues is heard on every side. The gathering of the peoples of the earth has begun.

World's Fair Impressions.

BY A CANADIAN.

The general appearance of the dome and the two east curtains of the horticultural building (which are under John Thorpe's surveillance) is gradually assuming a more finished look. An immense quantity of "stuff" has been received this week. A lot of small palms from Trinidad arrived in pretty good order considering the distance they had to travel; amongst them are several rare kinds that one seldom hears of or reads about. The one out of the lot that traveled better than any was Ptychosperma Alexandræ, and there is no doubt but that it would be a valuable

palm for florists to grow for decoration, in appearance it struck me as being like a cross between Kentia Belmoreana and Seaforthia elegans. The crotons and dracænas in the same shipment were all badly damaged, the leaves having all fallen off the former.

A Mexican exhibit of cactus also arrived during the week and every one, whether interested or not in this class of plants, should take a look at them; they will be curious to the uninitiated and instructive to cactus fanciers. They are planted on a mound on the west side of the northeast curtain.

New York has also opened up two or three car loads of large palms, Pandanus Veitchii and utilis etc., and the space under the dome allotted to it is under the able superintendence of Mr. Donlan getting into good shape. More cars are on the road and will arrive next week.

The great event of the week however was the arrival of nine car loads of plants from Messrs. Pitcher & Manda's on Saturday afternoon at about 4:30, and it will give some idea of how things are done here when I say that the cars were all unloaded and the plants in the building by 7 p. m. As far as could be seen the next morning they appear to have travelled well, but it is a little tough on tender stove plants and ferns to be taken out of their warm home at this time of year, and in such weather.

Every one unites in saying that such execrable weather as has been experienced during the last week was never before seen in Chicago. Wind, rain and snow—Snow, rain and wind—and MUD!!! Happily at this date (23rd) there are signs of better things. E.

Forcing Houses with Short Span to the South.

Several articles have appeared in the FLORIST on this subject, but none of them, as far as I can see, have gone fully into the details of its merits for the whole season; and to many others I know, as well as myself, it would be interesting to know something more about them.

It has been stated that such houses have already been some time in use in Milwaukee and better roses have been grown in them than were ever before produced in that section; but that is not conclusive that they are the best style of house for winter forcing. Had the same parties built also some of the modern light houses, with the long span to the south, and given the plants an equal show, their verdict would then have been of much more value.

There is one point which the advocates of this new style of house seem to lose sight of, and that is the amount of direct sunlight the plants need from the time they are planted to insure good, firm, solid wood, or, in other words, a good, vigorous constitution to stand the strain of hard forcing which the plants have to submit to during the short days, and I think on thorough investigation it will be found that the improved modern house with the long side facing due south offers the best means for disseminating the greatest amount of direct sun rays to the plants during the late summer and early fall months (as well as during the winter) during which time the constitution of the plants contained therein is built up for the coming winter's hard work.

Some of the advocates of the short span-to-the-south system use as an argument in its favor that the southern short slope being much more vertical the sun strikes it at nearly a direct angle during the short days, which diffuses more light through the houses than can be obtained by the old method. This may possibly be true, but does it follow that the system is to be generally adopted on that account? I think not, for several reasons. On the bench nearest the north only very dwarf varieties could be grown or they would be altogether too much shaded by the other bench, in fact the south bench must shade the north one altogether from any direct rays of sunlight, have it which way you will. Now, long experience of the oldest men in the business, and the teachings of generations of gardeners, has been to the effect that to get the best results from any plants such as is generally forced for winter flowers they should be as near as possible placed where they can get all the direct sunlight possible, and as near the glass as is consistent according to respective heights they grow, etc. Having this fact in mind was one reason why I adopted the sloping bench plan, which has been fully explained and illustrated in the FLORIST.

Now if this is all wrong, why, I want to know it, and as soon as clearly shown that we are all building our houses wrong I shall get ready to adopt the new style, but I would like to know how snow is cleared off the north side of such houses, or is it not necessary to do so, possibly with so much more light through the six feet of south side glass the plants do not need any from the sixteen feet on the north, particularly as I see it advocated as an advantage that any number of such houses can be placed together on a level surface without shading each other. By that I infer that snow never bothers the florist in Illinois and Michigan, (happy men!), but with us in Jersey such houses would have to be built strong enough to bear up a railway train, or the snow would surely break them down. But then glass being so cheap, this, I presume would be of little consequence, neither would it matter about getting the snow off the glass anyway as with all the additional light from the south the plants would never suffer from having a heavy coating of snow on the roof over them, though with us around New York it would mean a large item of additional labor, to say nothing of broken glass, by the men getting cold, careless, etc., even with plenty of room between the houses for working; and, with my experience in houses built on a similar plan for other classes of plants it has always been a very troublesome and disagreeable job to clear the snow off, as but very little melts on the glass, and what does being that which comes in direct contact with the glass, often freezes nearly as fast as melted, making it all the harder to clean off.

These are a few of the reasons why I would like to hear more particulars about this so-called "new system" before adopting it; though there are many other items I could mention, they may be all a myth and vanish before the strong light of the advocates of this principle.

Summit, N. J. JOHN N. MAY.

Yours asking me to give you my opinion as to the merit of greenhouses with the short span to the south is at hand. For our location and purposes the short span to the south is of no earthly use as far as my observations go, for I have had experience with a house of that kind long before there was anything said about them in the horticultural papers. In 1880 when I bought my present place my predecessor, Mr. P. Schupp, had one house with a short span to the south and long one to the north, planted with Bon Silene roses, but one winter's trial was all that I wanted of that sort of house, for I found that it took a great deal more fuel to heat it, got less light and produced not near as many blooms as the houses with the long span to the south. Therefore I reversed the house the following season after I bought my place.

The argument of W. T. as to the effect of the sun's rays when passing through glass at various angles may be all right for all I know, but experience has certainly shown me that the short span to the south is not the style of house I should adopt for my business. ERNST ASMUS.

W. Hoboken, N. J.

[The above opinions, both adverse to the short-span-to-the-south system, are from old experienced rose-growers, and their conclusions should have a great deal of weight. At the same time the claims of those who have tried this style of house and found it better than the older one should not be hastily passed over. It should not be overlooked that the style recommended is not an *exact* reversal of the old three-quarter span house, which would, of course, have many objectionable features. But Mr. May makes a strong point as regards the snow laying upon the long north span. Still, we understand that those using this style of house have had no trouble from this source during the past winter. Whether the average of light and heat during the months it is specially valuable to the grower is or is not raised by placing the glass on the south slope at a certain angle is of course a question to be definitely settled by scientists. And feeling the importance of having the matter determined in such a way as to clear up all doubt we shall print in an early issue an illustrated article showing clearly just what percentage of light is lost and gained by using certain angles and also what angle will give the best average during the months when most needed, and the least when least needed, providing the difference is sufficient to be worth consideration. ED.]

Decorations at the Inaugural Ball.

We present in this issue three views of the decorations at the last Inaugural ball, Washington, from photographs taken at the time for the General Electric Co., who furnished the electric light decorations, and from whom our Washington correspondent secured copies. These decorations were described in our Washington letter on page 842 of our issue for March 23.

Looking Forward.

Now that the season of 1892-3 is nearing an end it is interesting to hear the verdict of the growers on the results of their labors during that time, and also to note something of their plans for the future. Doubtless many ventures gone into after careful study this time last year have not realized all that was expected, but the feeling all over, notwithstanding this, is decidedly of a hopeful kind.

In this latitude those who went into tulips last season are emphatic in their statement that they have had enough of them. And it is not, as might naturally be supposed, because there was a glut

DECORATIONS FOR THE INAUGURAL BALL, WASHINGTON.

that they would not sell. W. K. Harris had the market about all to himself at certain times early in the season, and even then could not sell. People did not want them. That is all there is to it. There was some sale for pots of tulips at Easter but outside of that they have been a perfect drug. Ernst Asmus, Robert Craig, and other tulip men all say the tulip's day is done for the present.

There was a raft of hydrangeas grown for the Easter trade here, the largest handlers being Joseph Beavis, W. K. Harris, Geo. Anderson, and Lemuel Ball. But they all went. Ten thousand dollars would be a conservative estimate of the cash which the hydrangea turned into the coffers of the growers here. The dealers would net as much more. So that the volume of hydrangea trade in this city alone would be $20,000, at a low estimate. The red-branched hydrangea seems to be growing in favor. There will be a good deal more of it on the market next spring.

Is La France getting played out? There are but few distinct successes with it in this latitude. Smith & Whitely at Lansdowne have a good house of it and one or two other parties have fairly good lots, but as a rule the growers are not satisfied with its behavior. Whether Testout is to prove the one to supplant it remains to be seen, but many are now more inclined to give the new-comer a trial. Those interested in Testout have been watching results with Mr. Asmus, and the feeling seems to be growing that the Testout has a future notwithstanding the fact that it did not do so well with Mr. Asmus early in the season.

Bridesmaid is another of the new comers that is finding favor among the growers here. Not many tried it last year, nearly everybody being in a conservative frame of mind about new roses. But this year the Bridesmaid is well to the front among their plans for the future and Mr. Moore must be feeling very happy with the way his pet is being called for.

Kaiserin Augusta and American Belle are both affected by the conservative feeling. Growers are evidently not going to go heavy the first season of anything new

—their experience with Waban, Duchess of Albany and many others is still rankling. Mr. Burton says his orders for Belles have been numerous enough, but what surprised him was the fact that the majority were for quantities under a thousand plants. The effect of this conservatism will naturally be a big run on his stock next season, as there will be but few with quantity enough to prove much of a competitor.

Mr. Beavis will put in a house of his new rose the "White Perle," which he has great faith in. He will probably send it out in 1894. He wishes to see how it behaves another season and on a more extended scale before finally deciding to disseminate. This new sort occupies a distinct niche as a summer bloomer besides being a good winter rose. It has all the good qualities of the Perle with none of its defects. The Pennsylvania Horticultural Society awarded Mr. Beavis a silver medal last fall for this new sort.

Carnations have been pretty low in price, but the demand is now so large that production next season will probably be larger than ever. The consensus of opinion as to the best white is unanimous for McGowan. They all say "the greatest bloomer in existence," "nothing to equal it," etc. Hinze is grown a good deal. Silver Spray does not seem to find so much favor here as around Buffalo and some other places. McGowan is now at the top and will undoubtedly be in larger supply than ever the coming season.

Chrysanthemums are also occupying a place in the plans for the future. Time was when many large growers did not care to bother with chrysanthemums in the fall, but that day is about gone and the production according to present appearances will be larger than ever.

Mr. Burton will grow the same line as usual—tried and true friends in hybrids, teas and palms—also a house of smilax and one of Asparagus plumosus.

Mr. Lonsdale will also depend on his standard line of roses, carnations and palms, but has besides several novelties that may amount to something the coming season. The most promising is the white swainsonia, which although not really a new thing, is still a novelty in the trade for cut flowers. It is a beautiful thing and will no doubt be largely grown in the near future. Mr. Lonsdale promises to favor the readers of the FLORIST with an illustration of this swainsonia as soon as he can get a little time to have a photo taken of same.

Another novelty which was seen in this market in limited quantity this year was the Callistemon speciosus or "Bottle Brush." According to Mr. Thos. Cartledge, who is a good authority, this will sell well and will prove a good thing for Easter. It should be included in the list for '94. Mr. Keller of Bay Ridge had some of it the past season and liked it. According to Nicholson, the treatment is as follows: "The soil best suited it is a mixture of loam, peat and sand. Ripened cuttings strike root in sand under a hand glass; seeds are frequently produced on large plants and these may also be used to increase the stock, but they do not produce flowering plants for a considerable time, whereas plants raised from cuttings taken from flowering plants come into flower when small. The plant belongs to the myrtaceæ and is known also as Metrosideros speciosus."

GEORGE C. WATSON.

Phila., April 22, '93.

Seasonable Hints.

A few thousand carnation plants are very easily managed. They can be held in a frame of a few sash and a day or two of good weather suffices to have them all snugly planted. The case is different when they are handled by the 10,000 both for sale and home use. Young plants in all stages will be on hand. The last cuttings are now about ready to come out of sand. Many are heeled in benches in a cool house, held for sale, or until time can be had to pot them. Thousands are in pots and thousands more in frames out doors and ready to go in open ground when the opportunity offers. Perhaps many have already been planted. These must all have proper attention as to watering, shifting, weeding, topping and fumigation.

Watering needs close watching. While the plants should not be allowed to become too dry, they must not be heavily soaked at any time. It is best to cover those in frames with sash during heavy storms or many will be lost by excess of moisture. Heeled in cuttings must be kept pretty dry or they will damp off badly. The latter must be potted or trayed before they become drawn if fine thick set plants are desired. Those in pots that have made good balls can be knocked out either into trays or directly heeled in a cold frame. We are using this latter plan very satisfactorily this season. The frame is prepared by loosening the dirt and fining it with a rake. The balls are placed close together well down in the dirt and without breaking joints, as they will be close enough without. A 3x6 sash will thus hold about 800 plants, and they will keep and grow nicely here for three or four weeks if necessary. This plan also really saves time when they are taken up for planting in the field. The pots are used a second time.

It is needless to say that weeds must be kept down at all times; but see that a careful hand is employed at the job, as the little plants are very easily broken for one thing. Another matter is that the varieties are very easily mixed unless particular pains is taken to prevent it.

Topping should be done when necessary, but where the plants are held for sale it is not a good plan to top too soon, as the topped plants do not present a very sightly appearance until they have thrown up new shoots. Plants showing bud should be pinched back at once.

Fumigation is very necessary regularly once a week at least. The young shoots are great harbors for the green fly, and when the insect is well lodged down in the young growth, it is almost impossible to dislodge it. If they become very bad nightly fumigations, not too heavy, will do the work. W. R. SHELMIRE.

Avondale, Pa.

A FINE BUNCH of Lizzie McGowan carnations was lately received from J. S. Stuart, Anderson, Ind. They were fine, long-stemmed flowers, accompanied by quantities of buds; the only criticism to be offered is that they would have appeared to still better advantage if left on the plants a day or two longer.

Chrysanthemum Synonyms.

Cannot some effective means be employed to prevent the double christening of chrysanthemums as well as the introduction of old varieties under new names? The confusion caused by duplication of names is well illustrated by the variety known as Mattie Stewart. This variety was sent out in the United States in 1890. The year following, a leading grower of England distributed the same as Mrs. F. A. Spaulding, having received it from an American firm. During the autumn of the same year it again put in an appearance. Two different firms showed it at the November show of the National Chrysanthemum Society. By one it was called J. Stanborough Dibbens, under which name it received a certificate from the Floral Committee at a later meeting. The other exhibited it under a seedling number, but afterwards catalogued it as Mrs. Dr. Mandeville. In one of the American chrysanthemum lists of this season J. Stanborough Dibbins is advertised as an English novelty. In reality it is the same as Mattie Stewart. The four varieties have been grown at this place side by side with exactly the same treatment. The result was that they proved to be identical in every respect both in regard to foliage, habit, color and form of the flower.

One of this season's novelties came into existence with a number of names. Reference is made to the white sport from the well known Louis Boehmer. It appeared last year in France under the name of "L'Enfant des deux Mondes" which in English means "The child of the two Worlds." It is generally known at present as White Louis Boehmer for the want of a better name.

May we hope that our introducers of new varieties both in England and America may use more care so as not to unnecessarily lengthen a list already of such magnitude. H. A. W.

England.

Mr. Thos. H. Spaulding who disseminated "Mattie Stewart," says that he bought the variety from a party at Englewood, N. J. the year before it was exhibited at Indianapolis, when it won the "Stewart" cup. The party from whom the variety was bought stated at the time of purchase that he had *two* large stock plants. He only delivered *one*. The following year it was Mr. Spaulding's intention to show it as "Mrs. F. A. Spaulding" and he sent a plant in exchange for other novelties to a nurseryman in England stating the fact about the name. The cup which it won at Indianapolis was given for competition by Mrs. Stewart, who reserved the privilege of naming it, which she did—after herself. It was not shown anywhere that year under name, and when it was decided to show it at Indianapolis, the florist in England to whom a plant had been sent was advised that the name Mrs. F. A. S. would not be retained, and to await further instructions, which were given as soon as possible after the prize had been awarded, but he stated that he had published it in his catalogue as Mrs. F. A. S. It was not shown in England that season —we believe.

The same year that it won the cup at Indianapolis, when it was shown at Orange N. J. Mr. S's. attention was called to a variety named "Dr. Mandeville," which Mr. Spaulding claimed in

DECORATIONS FOR THE INAUGURAL BALL, WASHINGTON.

the presence of the party from whom the variety Mattie Stewart was bought, that they were one and the same. This was denied. However, in consequence of the suspicious appearance of matters Mr. S. declined all further negotiations with the alleged raiser which were at that time pending. Dr. Mandeville and Mattie Stewart were compared side by side and no difference could be detected either in foliage or bloom. The Dr. then dropped out and skipped the next year's shows, possibly on account of the suspicious appearance of matters. Mr. Spaulding thinks that the one which is now called Dr. Mandeville is different from the one shown at Orange; although the color of the flower is similar yet the foliage and habit of the plant are distinct. He is willing to admit that he *may* be mistaken.

It is stated that less than a dozen plants had been sold the first year in England as Mrs. F. A. S. and since then as a synonym of Mattie Stewart, under which name Mr. S. distributed it. In America it is not known as anything but Mattie Stewart.

Mr. Spaulding further states that last year "J. S. Dibbins" came out as an English novelty and *was certificated*. It is doubtful if it would have been so honored had it been shown as an American novelty. It was received too late as a plant in this country to flower last fall. It was tested by him this spring, but was afterwards informed from England of the synonym. No one on this side the Atlantic has as yet been taken in, as Mr. S. believes he is the only one who has catalogued it, and he does not remember of a sale having been made. He has compared the habit and foliage and it is identical

with Mattie Stewart, having that same fault—rust. There is no doubt but what these two are the same. But Dr. Mandeville—in America now, is not the same.

Regarding "Enfant des deux Mondes," the description is as given and the facts are as stated, but there are only two parties on this side that have listed it. Messrs. Hill & Co. and myself (T. H. S). and both call it E. des d. M. No confusion has been noticed in any of the foreign catalogues. Newspaper articles refer to it as E. des d. M. and state that it is a white sport from Louis Boehmer. No suggestion of deception has been apparent anywhere.

Had your English correspondent gone further and stated that the double naming of varieties was altogether too prevalent in England, and that it was now the exception in America, he would have been nearer right, for on looking back it will be seen that more than one firm is up to this trick over there, whether by accident or design we are not prepared to say. As examples of what has been done note the following American varieties that have been renamed in England:

AMERICAN NAME.	ENGLISH NAME.
Robt. Bottomley	Lady Laurence
Christmas Eve	Mrs. Cannell
Mrs. Gerard	Mrs. Dunnett
Mrs. F. Thomson	W. G. Drover.

The above were all purchased by Mr. S. under their English names and of course he was taken in each time. E. L.

Miscellaneous Seasonable Hints.

Watering the plants in pots on the benches, particularly the smaller sizes, is now in bright weather a daily job, and it is of the utmost importance that it should be thoroughly done. While a little shade will hurt no plant at this time of year, too dense a shade is very injurious, especially so to soft wooded bedding plants which in a few weeks you will expose to the fierce rays of the sun without any protection from either wind or sun. The amount of water that plants now need will greatly depend on what they are standing on. Many florists use sifted ashes. They are cheap because produced on the place, but they soon get dirty and baked down about as hard as dry boards. I much prefer coarse sand where it can be procured without much expense. Where you can afford the time to plunge the pots in two or three inches of some material such as ashes, tan bark, or, best of all, refuse hops, little or no shading is needed and the plants will far outstrip those stood on one-half inch of sand. What there is about the hops I don't pretend to know, but it is a fact that a batch of plants plunged in hops will completely out grow a similar batch simply stood on the bench, other things being equal.

Those who have not stock enough yet of that most useful begonia, B. incarnata grandiflora, should propagate all they can at once. It roots quite as well now without much bottom heat as it does in midwinter. It is always right in at Christmas and is indispensable to the retail florist. Keep them in a house with little shade during summer or plunge them outside during the summer months and don't pot in too rich a soil or they will grow too fat and wilt quickly when cut. It is also a very valuable plant for selling in pots around Christmas if grown with plenty of day light and cool. It is a very satisfactory plant.

Those who grow a small collection of orchids, like myself, will find the following species starting to make breaks: Cattleya Trianæ, C. Percivalliana, C. Gaskelliana, C. labiata, Lælia anceps, L. autumnalis, L. Arnoldiana, Dendrobium Wardianum, D. nobile, and several others that flower during the winter. They should now have plenty of heat and moisture both on the roots and in the atmosphere. Those who have orchid houses know all about it, but those who have only a few hundred can put them in with their palms and the syringing and temperature will suit both. On warm days give plenty of air.

Those who started tuberoses in sand six weeks ago can pot them into 4-inch pots now and plunge in a mild hot bed. They do much better there than in the houses. You will perhaps have noticed that there is now a good demand for narcissus and tulips. Remember this for another year and don't rush them all in for Easter, when, in many cities, they don't go. If you have an ice house it is not too late to put some there and retard them for Decoration Day. If you don't own an ice house ask your neighbor the butcher, or better still pay for them in a cold storage house. I have put 100 flats of Von Sion in cold storage and shall bring them out two weeks before Decoration Day and they will be most useful I know, for with us northern florists there is a great dearth of flowers just at that date. If you have any now, try it at once. WM. SCOTT.

Buffalo, April 24.

Philadelphia.

The regular monthly meeting of the Penna. Horticultural Society held last Tuesday evening was poorly attended; it seems there must be something very attractive in the way of a lecture or an exhibition to bring the members out.

Those who were present, however, were very agreeably entertained with a description by Mr. Geo. Watson of a collection of flowers obtained from the estate of Mr. Jones, a former vice-president of the society, through Mr. Bell, the gardener. Mr. Bell said that the past winter was the worst for outside plants he had ever experienced. The specimens had all been taken from hardy plants now in flower outside on the lawn and in the border beds. There were two distinct species of tulips, English primroses, Iris stylosa, a new variety of flag, two varieties of Christmas rose, olympicus and abchasicus, the only varieties that are entirely hardy. There was a flower of the hardy calla, Arum italicum, flowers of the grape hyacinth, Muscari racemosum, and a few sprays of Banksia roses, obtained from a cold pit, through which was a running stream of spring water; this sufficed to keep out the frost in the most severe weather. There were a few sprays of both the double and pink lily of the valley, also a few specimens of the true Viola tricolor with blossoms about as large as a ten cent piece, but perfect in shape and coloring. Dicentra cucullaria, white bleeding heart, was one of the novelties. Narcissus Horsfieldii, of which a few flowers were shown, was raised, Mr. Watson said, by an old weaver in England; it was one of the first varieties, but would always be scarce, as it was difficult to propagate. There was some Kerria Japonica, Arabis alpina, a small flower like candytuft, two varieties of magnolia and other flowers. Of the varieties shown, while very beautiful and interesting, few had any commercial value.

Mr. Farson reported the society to be in a flourishing condition. Ten new names were added to the list of members and a number proposed for action at the next meeting.

While the volume of business is decreasing, there is still enough to keep all hands moving and fairly busy. There are more flowers than are wanted, but the demand is good for the season of the year and prices are fair, remaining about the same as last week, with the exception of valley, which is now held at $4 a hundred. Smilax is very scarce at $25.

The first smoker of the Florists' Club, which will be held after the regular meeting of the club, promises to be a very enjoyable occasion. Mr. Taplin's paper on modern methods of growing palms will be well worth hearing, and this with the entertainment provided by the committee who have the smoker in charge, should bring out a full house.

Harry Michell and Z. De Forest Ely & Co., two seed firms of this city, had a narrow escape from fire one night the past week. They occupy two large stores within three doors of one another on Market street below 11th. Between them was a large hardware establishment which was entirely cleaned out by fire. At one time the situation was so serious that a third alarm was struck, but fortunately the firemen managed to keep the fire from spreading beyond the building in which it originated. Mr. Michell's store was slightly damaged by water, which will rust some of his implements, and the stock of fertilizers stored in the basement, which was half filled with water, will also be damaged, but his insurance will fully cover the loss. Mr. Ely escaped without injury. Both firms report business as being excellent.

Mr. Geo. Watson, late with John Gardiner & Co., has opened an office in Horticultural Hall and rented storage facilities in the immediate vicinity and will do a wholesale business in seeds, bulbs and plants. His long experience (17 years) in this business, both in this country and Europe, gives him the trained knowledge that is necessary to conduct a business of this kind successfully. He will do an importing business in all kinds of bulbs and florists' stock. He has made contracts with the raiser of the Bridesmaid and will handle the stock in this vicinity, as well as Kaiserin Augusta, Testout and other new roses, acting as growers' agent for these and for fine stocks of palms, rubbers and other foliage plants. He has our best wishes for his success.

Mr. Harry Bayersdorfer will sail for Europe on "City of Paris" May 6.

K.

Boston.

There has been a considerable falling off in the quantity of roses coming into the market, and as trade in general has revived somewhat the demand for flowers and prices received have been more satisfactory than during the previous fortnight. There has been somewhat of a surplus of belated Easter stock which has been coming in from the growers who found themselves in the position of "the under dog" in the tussle with the late severe winter. Harrisii lilies have been very hard to dispose of and prices amount to but little.

Geo. Mullen has moved from his somewhat obscure quarters on Chapman Place to a large, light and in every way commodious location on Park street.

Among recent visitors from abroad was Mr. Gerard Kruyff, of Van Waveren & Kruyff, Haarlem.

Mr. David Allan is well pleased with the prospects in his landscape gardening

DECORATIONS FOR THE INAUGURAL BALL, WASHINGTON.

business. He has all he can possibly attend to.

Mr. C. B. Weathered was in town during the past week.

Out at South Framingham, Messrs. H. H. Voorneveld & Son, who have leased the W. S. Phelps place, are making extensive additions to that establishment.

Washington.

Mr. John Cook, of Baltimore, is again at the front as the leading American originator of new roses. He has recently disposed of a one-half interest in the new pink seedling rose Miss Garrett, to C. Strauss & Co., the rose growers of this city. This is the same firm that so successfully disseminated Mr. Cook's Souvenir de Wootton some years since. I am advised that they disposed of over 60,000 plants of the Wootton during the first year of its introduction, in the face of bitter assaults on the rose from many leading quarters. In spite of this opposition the Wootton has grown in popularity until now it ranks as one of the standard forcing roses, and those most violent in denunciation of it are now loudest in its praise.

The rose Miss Garrett is a beautiful and permanent shade of peach-blossom pink somewhat deeper than the Baroness Rothschild and very much larger than that rose. The flowers are borne on strong, stiff stems furnished with heavy foliage of a delicate green shade, and often the individual flowers are six inches in diameter. It is extremely floriferous and continuous in its bloom, responding freely to generous treatment. It might with propriety be called a pink Puritan in habit of growth, without the bad traits of that rose. The foliage continues well up the stem under the bud. Messrs. C. Strauss & Co., predict for this rose a greater success than has been attained by any rose now in cultivation under glass. It is a long step in the direction of securing an ever blooming rose which shall produce flowers equal to the hybrid remontant. No plants of this rose I am advised, will be sold until the spring of 1894.

While looking over the houses of Messrs. C. Strauss & Co., I received a delightful surprise upon entering that containing the Kaiserin Augusta Victoria. Of this rose they have about a thousand old plants in the benches from which they have up to this date secured 15,000 young plants in 2 and 3-inch pots. It is their intention to plant about 12,000 of these for cut flowers under glass and the balance in the field, and they are consequently making no special effort to distribute plants through the country, as they believe the sale of cut flowers next winter will prove more profitable than the sale of plants now.

Their attention was called to a paragraph in the "Comments on Varieties," in the March 30 issue of the AM. FLORIST, where it is stated that the "Kaiserin" is not a good winter bloomer. They emphatically contradict this statement and claim that it is not only one of the best winter bloomers, but that it out-ranks other white roses in color, beauty of form, freedom from blind wood, keeping and shipping qualities, in fact in every point wherein a rose should be most perfect, and I can testify to these facts, from observation during the past winter. They seem to think that there is a deliberate attempt to check the introduction of this rose for forcing purposes.

Messrs. Strauss & Co. are large growers of the "White La France," or Augustine Guinoisseau, and claim for it many advantages over its parent, the La France. They have about 12,000 bushes of this rose in the benches at the present time, and are inclined to increase for the coming season.

They also are growing largely the new rose Christine de Noue, which, though not so free blooming as some of the other roses, is much more continuous in its bloom, and surpasses any other red rose

in keeping and shipping qualities. Their houses of carnations were undeniably the best I have ever seen. The varieties grown by them are Mrs. Fisher (in large quantity), Lizzie McGowan, Hector, Ferdinand Mangold, Nancy Hanks, Grace Wilder and Golden Triumph. For the latter they cannot find words of condemnation strong enough. Instead of calling it Golden Triumph, they call it "Rusty Triumph."

They are making a specialty of sweet peas this season, and have been cutting very freely for the past six weeks; their cut now averages about a thousand sprays per day.

They advise me that they had already planted something over 40,000 carnations in the open ground, and that they were doing finely. It is their intention to rebuild all their palm houses this season, with all the latest improvements.

C. LESLIE REYNOLDS.

New York.

It is gratifying to be able to report a much healthier condition in the flower trade than prevailed one week ago. Prices are not much advanced, for when once prices go way down it is difficult to restore them, particularly at this season, but the daily stock coming in has been considerably reduced, and after the various legitimate calls have been supplied, there has been but little left to be sacrificed at lump figures.

There have been several funerals of prominent people, which have caused quite a demand for white flowers, and among the numerous notable social events of the week, the much-talked-of Bradley-Martin wedding has also had a good effect on the market. The quantity of flowers used on this occasion was very large, and the excitement in and about the church almost unprecedented even in New York. The attention of the throngs of curiosity seekers was well divided between the titled groom, his youthful bride and the floral decorations, the latter being stripped from their fastenings after the close of the services, by the crowds of women who went almost crazy in their struggle to obtain and carry away relics of the event.

The special meeting of the Florists' Club on April 20, was lightly attended on account of the stormy weather. The principal interest centered in the report of the committee on club headquarters, for which Mr. Alex. Burns as chairman, made a report, stating that the management of the new Grand Central Palace on Lexington Ave. being anxious of making that place a popular center for exhibitions and other big events, and realizing the value of the support and co-operation of the Florists' Club in accomplishing this, had made a very liberal offer of suitable quarters for the club's meetings and monthly exhibitions without charge, and in addition were ready to proceed to arrange for the holding of the chrysanthemum show of 1893, at the Grand Central Palace, on terms very advantageous for the club.

This report was received with great satisfaction, and after a thorough discussion the committee was authorized to go ahead and make arrangements accordingly.

It was announced on behalf of the committee on the spring show that the rule requiring a deposit fee with every entry, has been suspended on account of the very general opposition to the same, and that entries might now be made without any deposit.

The committee on Press Club Fair announced that the principal contribution on the part of the Florists' Club would be the decoration of the electric fountain in the grand hall.

Mr. J. R. Pitcher has been writing some very readable and instructive articles on flowers, plants, private conservatories, etc., for the New York Daily *Tribune*, which are a welcome relief from the misleading and unreliable stuff usually provided for public consumption in the daily papers.

It seems hardly wise, however, to give people to understand, as Mr. Pitcher does in a recent contribution, that a portable greenhouse costing from $350 to $550 can be made to produce fragrant blooms enough to fill the house all the year round with perfume, that the ladies of the household can have their bouquets whenever they wish without patronizing the florist, plenty of plants to decorate the house on gala occasions, at a total first cost not much exceeding a florist's bill for a year, and that the future cost of maintaining will not be one-tenth as much as is usually paid to the man who sells flowers.

In the main, however, Mr. Pitcher's articles ought to have a most beneficial influence in developing an increased interest in plants and flowers and eventually helping the whole trade.

The employees of P. L. Bogart have the announcement out already for a fishing excursion which is to take place on Wednesday, July 19.

Jos. Beschamps & Son, of Bayside, are sending to the 34th street market some very fine Blanche Ferry sweet peas.

J. Austin Shaw will remove about May 1st from Broadway to a nice light store on 57th St., opposite Carnegie Music Hall.

Mr. H. A. Daacke is keeping his place of business open from 9 to 11 a. m. on Sundays, for the accommodation of his florist customers.

Chicago.

At the meeting of the Horticultural Society last Saturday afternoon the committee on by-laws reported quite a number of important changes as desirable. The list was considered seriatim, and after some amendments had been made the whole were ordered printed and submitted to the members by mail with notification that final action would be taken at the next meeting. There was some discussion upon the proposition to give the usual annual chrysanthemum show in November, some thinking that the World's Fair would interfere with the drawing power of such an exhibition this year. But others held that a break in the continuity of the exhibitions would be apt to work injury to the society. The matter was finally left to the discretion of the executive committee and a meeting of the committee was called for Thursday afternoon, 27th inst., at the Cut Flower Exchange.

There promises to be a big attendance at the meeting of the Florist Club Thursday evening, 27th inst., and quite a number of visitors from other cities will undoubtedly be present. The committee appointed to take preliminary steps regarding a contest in floral arrangement at the World's Fair in August will report a plan of operations at this meeting.

The business conducted by Albert Fuchs has been incorporated under the title of "The Albert Fuchs Floral Co.," with a capital stock of $25,000. The incorporators are A. Graeff, John C. Schoffen and Louis W. H. Neebe.

Last week the very bad weather and lack of sunshine lessened the production, and although there was, for some days, a decline in prices, business was fairly good. Saturday the demand was brisk, and prices advanced a little; stock was sold quite clean. Prices, though they fluctuated a little, remain much the same as quoted last week.

Bulb stuff is lessening in production, which is fortunate, as there is little sale for it. Harrisii is still in excess of the demand. Carnations are extremely good, Mrs. Fisher and Tidal Wave showing up finely. Most classes of roses are both good and plentiful.

Sweet peas have made their appearance; the only variety in is Nellie Jaynes (Painted Lady); it is good, selling readily at $1.50 to $2. Smilax is still rather scarce. A slight lessening in the supply is expected in most classes of stuff, which, if accompanied by the expected volume of trade during the opening week of the Fair, should increase prices and demand.

Buffalo.

April is the showery month, but not such showers are looked for as we have been visited with the past week or two. We have had blizzards of wind and rain which have been both bad for business as well as work. I cannot report business as quite rushing; too great a scarcity of spring weddings, parties, etc., but for that class of business the prospects are good. The funeral business, if I may use such an expression, has been lively. Flowers have been plentiful and prices correspondingly low. There is a good demand now and has been since Easter for tulips, daffodils, etc. There is nothing yet from outside in that line and they go better than they did in the winter months.

The bosses of the various growing establishments have been able to give but little personal attention to their business for a week or two past on account of the great amount of time taken up by saying yes or no, mostly no, to the large army of Dutch bulb growers or their agents. This is really getting to be a serious matter and it is difficult to suggest a remedy that will suit all parties. Spring guns and man traps won't do. The man who can sit at his desk and keep on writing for ten minutes while Due Von Thol is meekly waiting to say "How do?" and then only to raise his head to say that he "is too busy to talk to him to-day"—that man has a heart, or rather that section of brain controlling these matters, too small to adorn a rat, yet that man is to be envied in some particulars. If you are not a selfish, small built man, you are bound to have a civil word and encouraging remark for everybody and then begins the trouble. One of our prominent growers says he will select for heavy work another spring an athlete after the Corbett or Mitchell type whose duty it shall be on the approach of "Yellow Prince" to politely say, "No, the boss has gone to Chicago." It won't be the simple announcement itself that will save time as the style in which it is said and the great weight behind it. Seriously, of course, we need some of these worthy gentlemen, for we want some of their goods, but the number is embarassing.

Mr. D. B. Long is off on another of his trips.

Mr. and Mrs. C. L. Dole of Lockport were in town last week and report that business was good at Easter, but that they all suffered by some of the florists

putting prices away down, with the foolish idea that they were going to do all the business. W. S.

The ways and means committee of the Buffalo Florists' Club were invited by Mr. W. Scott to hold their meeting at his new house on Wednesday evening to devise the best means of carrying through the fall chrysanthemum show without drawing on the treasury.

As some members of the club were of the opinion that it was a good opportunity to give him a house warming, one or two approached him and the delight depicted on his countenance was enough for the delegation. The club were generally invited and showed up to a man. When we arrived there was G. S. in his cutaway, white tie, etc., to receive us, and still more enchanting, Mrs. Scott with her pleasant smile and hearty handshake, which made us all feel that we were going to have a good time.

The business meeting was then called to order and the unanimous opinion of all present was that the shows were not only a pleasure to the public, but a commercial benefit to the trade generally, and the best way to make it a financial success as near as possible and to save the treasury of the club was by soliciting from wealthy lovers of horticulture special prizes for different classes. Old heads at the business—either Cowell, Mepsted, Long, Constantine, McMillan or some others—moved an adjournment, which went through with a rush putting one in mind of the Buffalo Police Bill (Sheehan).

Five promising scions of the Scott family, colored for the occasion in true African colors, ushered the guests into the spacious dining room, which was tastily decorated with flowers and plants, "of course mostly bulbous stuff." But the tables, oh my! Everything in season, solid and liquid, and our hostess to see that none were neglected. It was enjoyable to the highest degree, G. S. being at his best. When we decided we had no more use for the dining room we followed our host to the parlors, where, as if by instinct, two rooms were quickly filled, each by a different faction, one headed by McMillan, the professor, etc., to discuss the newest and most fashionable disease in the plant world; the other with Rebstock, Asmus, etc., to sing, recite and do anything to amuse the younger members. And when the small numbers appeared on the clock pointed out by the hour hand, which will move on, with a hearty good night from our genial host and his charming wife, we all went home feeling kindly towards each other and wishing that we could hold all our committee meetings at the same house.

ONE THAT WAS PRESENT.

St. Louis.

The weather during the past week has been exceedingly disagreeable, being a combination of snow, rain and wind, the two latter predominating most of the time. Trade is rather dull, the supply running away ahead of demand, although at present the supply is slackening up somewhat, owing to several cold cloudy days.

John Armsby, gardener to Mr. Kaufman, has just at present a fine show of Dendrobium thrysiflorum, one plant being particularly well flowered. It is in a 6-inch basket and has 10 large spikes. There were also several D. nobile covered with bloom. Last season one in a 6-inch pot had 95 flowers. The chrysanthemums are looking strong and healthy and evidently were not starved for want of food. The growing of their stock in pots has to some extent been given up this season. Those so grown will be for specimen plants at the show. The majority will be planted out in solid beds, as the object here is to get large flowers. The roses were looking well and the amount cut from them has been astonishing. The secret has been strong plants and early planting, thus getting a large vigorous plant before the winter season sets in.

The Chandler Floral Co. have had during the past week some very fine Testout roses, but from present appearances it is to share the same fate as Albany and La France in this market. They are about to open another store, located on 27th street next to the St. Louis club house. This will place the control of three stores, located in different parts of the city, under one management.

Benton & Gindenbrink, who during the past season have been operating as wholesale florists on 13th street, have recently removed to 912 Olive, where they have opened a retail store.

In your issue of April 13, E. T. P. rates me rather soundly for my remarks about southern violets. I heartily agree with him in his remarks and am sure no animosity is entertained against any one sending into this market, believing as he does in an open market for all. The point made was the quantity sent in, and could he have been in my place and have seen the amount received that would never sell for enough to pay expressage, he would feel rather strongly too. A market can take but a certain quantity no matter what the price is, and after that demand is met the surplus is sure to be lost, so when we see three or four times the quantity the market will take coming in, we must naturally conclude that violets in the south grow ready bunched and express companies work for love and glory. Seriously, however, southern violets have taken the place of home grown ones, that is, have rendered the growing of them here unprofitable, and from the number of people in the south who are desirous of shipping violets, judging now by letters actually received, it will be but a very short time before it will be impossible for them to make both ends meet. R. F. T.

Baltimore.

Plants are becoming more and more the money makers, cut flowers less and less. Not but what there are plenty of both, and of good quality, but the out door stuff is becoming so plentiful in cut flowers that prices scarcely pay for the trouble of getting up and selling. Who, for example, that wants to wear a bunch of flowers, is going to pay a fancy price for fine roses when a large cluster of trailing arbutus, dainty, sweet, and lasting, can be had for ten cents? Add to this the host of out-door narcissus, tulips, hyacinths, etc., and it may readily be imagined that in-door stuff is getting down off its perch with more alacrity than pleases some of the growers.

Really fine Jacques, are selling at eight cents, yellow and pink roses at anything they will bring, frequently little enough. Carnations have to be very, very select, and have nice stems, to bring one cent; more frequently they are one-half or three-quarters.

This is the season when "Look out for tramps" should be posted in every potting shed. How often, oh! how often, has the scribe sworn off from the seductive and beguiling tramp gardener, who is capable of growing anything and everything under the sun, but who invariably proves a broken reed when leaned on for support; who is willing, seeing that he is out of a job, to work for astonishingly low wages, but who expects a raise as soon as you have got him, and whose excuses for "not doing it" are so many and plausible; truly

> Like a fire upon the hearth stone
> Is a neighbors homely (gardener)
> Like the starlight or the moonlight
> Is the handsomest of strangers.

Pretty to look at but not much for usefulness. Well, after all, one strikes a jewel once among a great many worthless pebbles, and once in a lifetime or so, the tramp gardener turns out just as he represents himself, so let us be thankful for that once. MACK.

New Orleans.

Easter trade was about 25 per cent. better than last year. Demand was for cut roses and baskets. Loose bunches tied with ribbon had the lead. Plant sales were very small. The weather was mild and fair, which was very favorable to the out door roses, such as Jack, Marie Van Houtte, Marechal Niel and Queen Marie Henriette. Easter trade in New Orleans was never considered much until this year. The florist business is increasing. U. J. VIRGIN.

SANDUSKY, O.—The Sandusky Floral Co. is building two additional greenhouses.

SANTA BARBARA, CAL.—The annual flower festival fully equalled expectations and was a grand affair.

NEWPORT, KY.—The Newport Floral Co., are remodelling their greenhouses. Jacob Maulis died April 12, aged 80 years.

CLEVELAND.—James Eadie has removed to larger quarters at 97 Euclid Ave., and now has one of the finest establishments in the city.

SAN FRANCISCO.—The California State Floral Society will hold its annual spring exhibition at the Mechanic's Pavilion May 17 to 20.

OTTAWA, ONT.—At the meeting of the Florists' and Gardeners' Club, April 13, two new members were admitted, and final arrangements were made for a concert to be given by the club on the 18th inst.

HOUSTON, TEXAS.—Arrangements have been made by local florists to ship 50,000 Cape Jessamine buds daily to Chicago, for sale at stands and on the streets during the first month of the World's Fair.

TARRYTOWN, N. Y.—James A. Logan, gardener to Geo. Lewis, Jr., died of pneumonia on April 12, aged 52 years. Mr. Logan was a native of Berwickshire, Scotland. He has been in charge of Mr. Lewis' place for 23 years, this position being generally regarded as one of the most desirable of its kind in the country. Mr. Logan, besides being a gardener of high attainments, was very highly esteemed as a neighbor and friend and held in a remarkable degree the confidence and esteem of those with whom he was associated, especially of his employer, whose grief at his death could not have been deeper had it been for a member of his own family.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—By a German, first class florist and gardener, as foreman in commercial or private place. Address FOREMAN, care American Florist.

SITUATION WANTED—Single, competent florist and gardener, well posted in all branches pertaining to the business. Address WM. K. 908 Spring Garden St., Philadelphia, Pa.

SITUATION WANTED—As foreman on either private or commercial place, thoroughly competent in all branches of the business. Best references, state wages. Address ROSE, care American Florist.

SITUATION WANTED—As foreman of commercial place, especially up in forcing roses. Only parties of character need reply. Ohio or St. Louis preferred. Address X Y Z, care American Florist, Chicago.

WANTED—A few hundred plants of Wineberry. VAUGHAN'S SEED STORE, Chicago.

WANTED—A first class designer and decorator, must be temperate and come well recommended. Address THE DENVER FLORIST CO., 233 16th street, Denver, Colo.

WANTED—Single man of energy and ability for roses and cut flower stock. Address with terms and experience J. T. WILLIAMSON, Prop. La Rose Gardens, Memphis, Tenn.

WANTED—A sober reliable man, thoroughly competent to grow roses, carnations, and a general assortment of plants. State wages and references. JOHN DOBBIE, Florist, Niagara Falls, Ont.

WANTED—Soon, a competent man as a working foreman in commercial place; must be first class grower of roses, carnations and other cut flowers. Address, with copies of references and wages required; also give other particulars. W. L. MORRIS, Des Moines, Iowa.

TO RENT—6 houses in Chicago with 11,000 feet of glass, stocked with forcing stuff, roses, carnations violets, smilax, etc. Address R P, care American Florist.

FOR RENT—Five greenhouses in one of the best suburban towns of Chicago. Good retail and wholesale business. Well stocked with general line of stuff. Address for particulars G S, care American Florist, Chicago.

FOR SALE CHEAP—Second hand No. 1 Exeter boiler, 18 sections, 25 horse power, as good as new; steam gauge, water gauge all complete. Price $500. This is half the price of new. Address J. G. BURROW, Fishkill, N. Y.

SPLENDID OPPORTUNITY—To let on lease for eight or ten years, a large property for greenhouses in most desirable locality; extra good home market; church near by, street cars running past premises, and within twenty minutes' ride of public buildings. Address J. W. Moore, St. Vincents' Seminary, Germantown, Philadelphia, Pa.

A RARE CHANCE.

For sale, on account of ill-health, a flower store, established since 1864, doing a good business in the flourishing city of Hoboken. Apply to

A. & E. ASMUS, 515 Washington St. HOBOKEN, N. J.

FOR SALE.

The Oldest Seed and Florists' Store in New Orleans

on account of retiring from store business, a large selected stock and good patronage from the best class of customers in the city. Address

R. E. SIMONS, New Orleans, La.

FOR SALE OR TO RENT.

The following greenhouse property, situated on the outskirts of Springfield, the City of Houses; or will sell Greenhouses, Stock and Fixtures and give ten years' lease of 2 acres land. Ten houses in all—5 houses, 10 feet wide, 65 feet long; 4 houses, 18 feet wide, 65 feet long; 1 house, 18 feet wide, 65 feet long. Steam plant! New double Florida Boiler. Stock in good condition, with a large and extra good home market. This is an opportunity in a life-time, as present owner has other interests to look after. If you are looking for a chance, apply at once to

N. D. WINTER,
5 Elm Street, SPRINGFIELD, MASS.

FOR SALE OR LEASE.

Florist's Establishment near New York City.

Florist establishment situated five miles from Harlem Bridge, in Westchester County, containing six acres of land in nursery stock with dwelling house, shed, barn, etc. 25,000 feet of glass heated by steam and hot water, well stocked with Palms, Ferns and Roses, doing a good home and wholesale trade. Never failing supply of water. Will only rent to a reliable party. Address

E. W. P., care Weeber & Don,
114 Chambers St., New York City.

TAKE YOUR CHOICE.

FOR SALE—An old established Florist Business at Dorchester, Mass., comprising 20,000 feet of land centrally located, on which are: 1 house 70x18 filled with Carnations; 1 house 70x16 filled with Roses; 1 house 30x11 filled with Violets; 1 house 30x10 filled with Violets; 1 sash pit 70x7 filled with Violets; 1 dwelling house 7 rooms. Plants in good condition and houses in good repair. Price $6,000.

FOR SALE OR RENT—A well equipped establishment within eight miles of Boston, comprising 8 acres of land on which are 1 house 120x20 filled with Mermets and Silver Sprays; 1 house 100x24 filled with Wilders and Plants; 1 house 100x11 filled with Wilders; 1 house 100x11 filled with Adiantums, 2-in. pots; 1 house 100x11 filled with Callas and Bouvardia; 1 house 100x11 filled with Callas, Bouvardia and Portia; 1 house 100x11 filled with Violets and Mignonette; 1 heated frame 100x6 filled with Mignonette; 1 propagating house 75 ft. long. Price $22,000.

FOR SALE—Eight miles from Boston. 1 acre of land, 8,000 feet of glass, including 4 houses, 100x18, 1 dwelling house 7 rooms. Apply to

N. F. McCarthy & CO. 1 Music Hall Place, Boston Mass.

CATALOGUE PRINTING. ELECTROTYPING.

Done with expert ability for Florists Nurserymen, Seedsmen. Write to

J. Horace McFarland Co.,
HARRISBURG, PA.

STRING

Your Smilax and other trailing plants with

GREEN SILKALINE.

Same cord can be used with plants when decorating. For samples and prices, address

JOHN C. MEYER & CO.,
289 Devonshire Street, BOSTON, MASS.

Cycas Revoluta

The Largest and Best Selected Stock of Cycas Revoluta, fronds and roots cut off, true long leaved variety, now on hand.

For general Japanese and Australian stock, apply to

F. GONZALES & CO.,
303-312 Wayne St., SAN FRANCISCO, CAL.

☞ Send for catalogue

MEXICAN PRIMROSES (Œnothera Rosea), fine plants, per 100, Apple Blossom, $3.00; Hermosa tinted, $3.00; Cooperia Pedunculata, 1st size, $3.00; 2nd size, $2.50; Cooperia Drummondii (ready in May) $1.50; Zephyranthes Andersonii Texana (May), $1.50; Crinum Zeylanicum, C. Careyanum, C. Sanderianum, C. Latifolium, $2.00 each, $20.00 dozen.

Carriage paid when cash accompanies order.

MISS LIZZIE FREEMAN,
1203 East Ave., AUSTIN, TEXAS.

BOUVARDIAS, rooted cuttings, $1.50 per 100. Mme. Crozy Cannas 10 to 15 cts. Write for special low prices for 2 year climbing and moss roses.

McCREA & COLE, Battle Creek, Mich.

FARFUGIUM GRANDE.

First-class plants. Price $8.00 per 100; $1.25 per dozen, by mail. Postage prepaid.

TILTON BROTHERS, 222 Grove St., Aurora, Ill.

SPHAGNUM MOSS. CLEAN, DRY, FINE. 1 Bale $1.25; 3 Bales $3.50; 10 Bales $10.00.

JOHN A. SALZER SEED CO., La Crosse, Wis.

ROSES

AMERICAN BEAUTY, 2½-inch pots $8.00 per 100. Also Bride, Mermet, Hoste, Wootton, Perle, Sunset, Meteor, Gontier, Cusin, Watteville, La France, $6.00 per 100; $50.00 per 1000.

MME. TESTOUT, $25.00 per 100.

CARNATIONS

DAYBREAK, $3 00 per 100; $25.00 per 1000. Portia (selected and extra selected), W. F. Dreer, Fred Creighton, Hinze's, Puritan, Lizzie McGowan, Grace Wilder, White Dove, Crimson and Peachblow Coronets, rooted early, very strong and healthy. In flats and in pots. Prices on application.

CANNAS

	Per 100
Mme. Crozy, fine plants	$15.00
Admiral Courbet, fine plants	8.00
Premices de Nice, fine plants	5.00
President Faivre	5.00
French Cannas, mixed	5.00

EDWIN LONSDALE,
WYNDMOOR, Chestnut Hill P. O., PHILA., PA.

ROSES

I grow all the leading forcing varieties such as

Mme. Testout, K. A. Victoria

Meteor, Wootton, Beauty, Perle, Bride, Mermet, Watteville, etc.

Let me figure on your order for May, June or July delivery, for first class stock.

MUMS. A good stock in 2-in. pots of all the leading cut flower and commercial varieties at $3.00 per 100; $25.00 per 1,000. Guaranteed true to name.

W. W. COLES, KOKOMO, IND.
Maple Hill Rose Farm.
Mention American Florist.

ROSES.

METEOR, 2¼ inch $6.00 per 100.
PERLES, 2¼ inch, $5.00 per 100.
PERLES, 3¼ inch, $45.00 per 1,000.

JOHN BURTON,
Chestnut Hill, PHILADELPHIA, PA.

ROSES,

CARNATIONS AND VIOLETS,
STRONG PLANTS,
WRITE FOR PRICES.

Kemble Floral Co.,
OSKALOOSA, IOWA.
Mention American Florist.

AMERICAN BEAUTY

And other Forcing Roses. **M. A. HUNT, Terre Haute, Ind.**

Send for Price List.

The Grand New Forcing Rose,

"American Belle."

Prices and full particulars on application.

John Burton, Chestnut Hill, Philadelphia.

SUNNYWOODS

CUSINS & WATTEVILLES

Please write for prices.
My stock of

BRIDESMAIDS

for May delivery is all engaged. Orders for June booked now.

FRANK L. MOORE,

CHATHAM, N. J.

Golden Returns.

200,000 ROSES 200,000

We offer well established, healthy plants in below named and many other sorts:

From 2-inch pots, $ 3.00 per 100; $30.00 per 1000
From 3-inch pots, 6.00 " 60.00 "
From 4-inch pots, 12.00 " 120.00 "
Not in excess of any one variety.

50,000 Hybrid Perpetual Roses 50,000

at $4 per 100; $40 per 1000, in 50 select varieties.

New and Rare Varieties at Special Rates given in our Wholesale List, now ready.

WE NAME A FEW SORTS ONLY:

Aurora, Bosanquet, Comt. de Labarthe, Bon Silene, Cels, Devoniensis, C. Mermet, Etoile de Lyon, Hermosa, Mme. Cusin, H. M. Stanley, Malmaison, Marie Guillot, Mme. Lambard, Marie Lambert, Marechal Niel, Kruger, Niphetos, Mme. Jos. Schwartz, Safrano, Perle des Jardins, Sombreuil, The Bride, etc., etc.

For anything in the Florist line, or send your lists to be priced. Address

NANZ & NEUNER,
LOUISVILLE, KY.

The New White Rose

KAISERIN AUGUSTA VICTORIA.

From 3-inch pots, $35.00 per 100. 5-inch pots, $5.00 per dozen; $40.00 per 100.

THE NEW VIOLET ROBERT GARRETT,

The healthiest and strongest growing violet up to date; strong, well-rooted runners, $3.00 per 100; transplanted runners, $4.00 per 100. Cash with order. . . . .

JOHN COOK,
318 N. Charles St., BALTIMORE, MD.

Mention American Florist.

Hybrid Perpetual Roses,

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.

Price Lists to applicants. Address

WILLIAM H. SPOONER,
JAMAICA PLAIN, (Boston), MASS.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST. . . . . .

ANCHORAGE ROSE CO., Anchorage, Ky.

This Year's Buyers Say:

"BEACENDALE, Ontario, Canada, April 2d, '93—The Rooted Rose Cuttings came to hand in great shape—just as fresh as spring daisies, and are doing well."

"PEARL RIVER, N. Y., April 10, '93—Received second shipment of Bride cuttings in good condition. The first shipment I had no trouble with, and they are growing very nicely."

"YORKVILLE, N. Y., March 21, '93—The cuttings arrived in good condition, and are satisfactory."

"CEDAR FALLS, Iowa, March 13, '93—Cuttings received O. K.—nicest cuttings and best packing ever saw shipped here. Will try you again."

"NEW HAVEN, Conn., March 29, '93—Rooted Rose Cuttings received in good shape, only a few of the roots broken."

CAMDEN, N. J., March 21, '93—Received the Rose Cuttings and found them very nice."

"HAGERSTOWN, Md., March 20, '93—Rooted Rose Cuttings arrived in good condition—don't have any trouble with them at all; don't expect to lose one in a hundred."

"HANNIBAL, Mo., March 20, '93—I have received your plants in good order. Thanks."

"TRINIDAD, Col., March 16, '93—Rose Cuttings received in due time, and first class condition. They are now looking fine. Many thanks for the careful packing."

"SEILING, Ills., March 28, '93—Rooted Rose Cuttings arrived in good condition, perfectly fresh and well rooted."

Our Special Offer:

With every $5.00 worth of Rooted Cuttings or Plants, ... we shall . . . . . .

GIVE YOU Ten Strong Plants of the Wonderful New Rose, CHRISTINE DE NOUE. . . . . .

C. STRAUSS & CO.

Largest growers of Roses for Cut Flowers in the world. * **WASHINGTON, D. C.**

MADAME CAROLINE TESTOUT.

The best rose of its color in existence. It has been fully tested in the New York market and

IT SELLS.

Hea'thy plants from 2½-inch pots now ready. Per 100, $25 00; per 1000, $200.00; 500 at 1000 rates.

ERNST ASMUS, West Hoboken, N. J.

ROSES FINE HEALTHY PLANTS FROM 2¼-INCH POTS.

Perles, Brides, Mermets, Niphetos, Papa Gontier, Hoste, Watteville, Cusin, La France, Albany, Wootton, at . $5.00 per 100, $45.00 per 1,000.
Meteor at . . . . . $6.00 per 100, $55.00 per 1,000.
Climbing Perle, at . . . . . $10.00 per 100.

John Henderson Co.,

FLUSHING, N. Y.

Mention American Florist.

3 1-2 Cent Roses.

HYBRID PERPETUAL and CLIMBING, Clean Healthy Stock, grown in 2½-inch pots. Such varieties as

Gen. Jack, La Reine, La France, Duch. of Albany, Anna de Diesbach, Perfection Des Blanches, Coq. Des Blanches, Giant of Battles, Md. Masson, Souv. De Duchere, P. Queen, Balt. Belle, Pride of Washington and Russell's Cottage.

JAMES BROWN, JR.,
WHITEHALL, ILL.

ROSES.

TEAS . . . . . $30.00 per 1000
HYBRIDS . . . . . 40.00 per 1000

Healthy plants, in 2-inch pots.
Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.
Trade list on application.

Jacob Schulz
LOUISVILLE

ROSES.

Finest stock in Northwest

Duchess of Albany,	Mme. Hoste,
La France,	Niphetos,
Catherine Mermet,	Perle,
Waban,	Sunset,
The Bride,	W. F. Bennett.

C. A. SMITH FLORAL CO.,
77 7th Street, South, MINNEAPOLIS, MINN.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

WE request subscribers to make remittance by draft or money order when renewing subscriptions, and to keep a record of the numbers and dates of same. This is to guard against losses in the mails.

THE Denver Florist Co., Denver, Col., send us a photograph of their lily house, taken just prior to Easter. There was an excellent showing of bloom and the plants seemed to be uniformly fine in quality.

WHEN SENDING us newspapers containing items you wish us to note please do not fail to distinctly mark the item so it can be easily found, as we can not spare the time to hunt through the mass of papers sent us for unmarked items.

THE REPORT of the Missouri Botanic Garden, lately received at this office, is a handsome volume of 226 pages, containing numerous plates. It contains Prof. Trelease's studies of yuccas, and a variety of botanical information, in addition to the history of the garden itself.

THE COMMISSIONER'S REPORT, Lincoln Park, Chicago, recently received, gives a resume of the history of the park from its inception in 1865 to the present time, and a more particular account of its progress during the past six years. It is beautifully illustrated with numerous half-tone engravings.

We are the People!
Who? KOFFMAN,
Where? WALDEN, Orange Co., N. Y.
What? SMILAX
25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.
When? ALL THE YEAR AROUND.
Also Adiantum Cuneatum Fronds
At $1.25 per 100.
And he pays the Express.

MARSCHUETZ & CO.,
FLORISTS' • SUPPLIES
23 & 25 N. 4th St., PHILADELPHIA, PA.
Send for Catalogue.

ALL READY
—FOR—
DECORATION DAY AND COMMENCEMENTS
Commencement • • •
Baskets at prices which cannot be underquoted by any one.
Celluloid Baskets, Silver Jardiniers, Silver Handle Baskets, Metal Wreaths.
All our own manufacture. New stock now ready for inspection.
WHOLESALE ONLY.
H. BAYERSDORFER & CO.
56 N. FOURTH STREET, PHILADELPHIA, PA.

WHERE? OH WHERE?
Can I get GOOD Hardy Ferns this spring and for Memorial Day?
Well, we know of but one place and that is at
H. E. HARTFORD'S,
18 CHAPMAN PLACE, BOSTON.
Also Bouquet Green, Laurel Festooning, Decorative Goods, etc., etc.

Cape Flowers, new crop in best white quality at $1.25 the lb.; 10 lb. lots, $10 net.
Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 30-in. upwards, at 45c., 50c, 60c., 75c. and $1.00 each, according to length.
Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.
Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.
Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc. For prices consult our
Trade Catalogue, mailed free.
August Rölker & Sons,
136 & 138 W. 24th St., P. O. Station E. New York.

IF YOU NEED ANY
Cape Flowers, Immortelles, Grasses, plain or fancy Baskets, Metal Wreaths, Letters, Doves, or any other thing in the Florists' supply line, mail us your order.
REMEMBER WE ARE THE
Leading Manufacturers of Wheat Sheaves and Baskets, and Importers of Florists' Supplies.
Catalogue on application.
ERNEST KAUFMANN & CO.,
113 N. 4th Street, PHILADELPHIA, PA.

WHOLESALE FLORISTS
La Roche & Stahl
N. E. CORNER 13th & Chestnut Sts., PHILADELPHIA.

SAMUEL S. PENNOCK,
Wholesale Florist
REMOVED TO REAR OF 42 S. 16th ST., Philadelphia, Pa.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE
FLORIST,
1122 PINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STEET,
St. Louis, Mo.

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.

	Per 100
Perle, Gontier, Niphetos	$ 4.00
Mermets, La France, Bride, Wootions	6.00
Meteors	8.00
Jacqs	12.00
Carnations, short	1.00
" long	2.00
" " fancy	2 50
Romans, Valley, Narcissus, Tulips	3.00
Violets, Adiantum	1.00
Callas, Harrisii	10.00
Smilax	20.00

In effect till next issue of this paper.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
116 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.: Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange.
45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY & CO.
Wholesale and Commission
FLORISTS,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

A. G. PRINCE & CO.,
Wholesale and Commission
FLORISTS,
45 LAKE STREET,
In Chicago Cut Flower Exchange. CHICAGO.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

WHITE DOVES
FOR FLORISTS.
Largest and finest stock in the United States. Write for prices to
S. J. RUSSELL,
103 Van Winkle St. Jersey City, N. J.

Mention the American Florist when writing to advertisers on this page.

Wholesale Markets.

Cut Flowers.

NEW YORK, April 25.

Roses, Bon Silene, Gontiers	1.00@ 3.00
" Perles, Niphetos	2.00@ 3 00
" Mermet, Bride, Hoste	3.00@ 5.00
" Cusin, Watteville	2.00@ 4.00
" Bridesmaid, La France	3.00@ 6.00
" Meteor	2.00@ 4.00
" Jacqueminot	6.00@12.00
" Beauty	10.00@40 00
" Hybrids	10.00@50.00
" Mme. Caroline Testout	10.00@20.00
Carnations	.75@ 1.50
Valley, hyacinths, tulips, daffodils	2.00@ 3.00
Harrisii	2.00@ 5.00
Callas	3.00@ 6.00
Violets	.50@ 1.00
Cattleyas	50.00
Mignonette	1.00@ 5.00
Adiantums	1.00
Lilac (bunch)	1.00
Smilax	35.00

BOSTON, April 25.

Roses, Niphetos, Gontier	4.00@ 6.00
" Perle, Sunset	4 00@ 6.00
" Bride, Mermet	6.00@ 8.00
" Jacq., Lutzet	12 00@25.00
" Brunner	25.00@40.00
Carnations	1.00@ 3.00
Violets	.50@ .75
Lilies, Harrisii and Longiflorum	4.00@ 6.00
" Candidums	3.00@ 5.00
Lily of the valley, tulips, daffodils	2.00@ 3 00
Narcissus Poeticus	1.00@ 2.00
Mignonette	2.00@ 4.00
Heath, per bunch	.50 to 75 cents
Primroses, per bunch	.08 to .10
Adiantum	1.00@ 1.50
Smilax	20.00@25.00
Asparagus plumosus	50.00@75.00

PHILADELPHIA, April 25.

Roses, Brunners	10.00@35.00
" Lafrays	15.00@30.00
" Beauties	20.00@35.00
" Belles	35.00
" La France, Mermet, Bride	4.00@ 6.00
" Cusin, Watteville	3.00@ 5.00
" Jacqs	8.00@10.00
" Perle, Gontier	2.00@ 3.00
Valley	2.00@ 3.00
Carnations	.75@ 1.25
Daffodils, tulips	3.00@ 4.00
Mignonette	1 00@ 2.00
Asparagus	00.00@75.00
Smilax	20.00@25.00
Adiantum	1.00@ 1.25
Harrisii	5.00@ 8.00
Callas	5.00@ 8.00
Sweet peas	1.00@ 2.00

CHICAGO, April 25.

Roses, Perles, Niphetos Gontier	3.00@ 4.00
" Mermet, La France, Albany	4.00@ 5.00
" Brides, Wootton Bennett	4.00@ 5.00
" Beauties	10.00@15.00
" Jacqs	12.00@18.00
" Hybrids	12.00@18.00
Carnations (short)	.75
" (long)	1.00@ .50
" (fancy)	2.00
Callas, Harrisii	10.00
Romans, Valley	3.00
Violets	1.00
Sweet Peas	1.50@ 2.00
Daffodils, tulips	3.00@ 4.00
Smilax	20.00
Lilac (per bunch)	.35c.

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

WHOLESALE FLORISTS,
JOBBERS IN . . .
. . FLORISTS' SUPPLIES,
FLORISTS' VASES.
METS, BRIDES, GONTIERS, CARNATIONS, ALWAYS ON HAND.
1 Music Hall Place, BOSTON, MASS.
HORTICULTURAL AUCTIONEERS. . .

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., BOSTON, MASS.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
The finest Roses, Violets and Carnations
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country. Price list on application.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

GEO. MULLEN,
WHOLESALE FLORIST
Florists' Supplies Always in Stock.
7 PARK STREET,
BOSTON, MASS.
Orders by Mail, Telegraph, Telephone or Express promptly filled.

The Seed Trade

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1893. Applications for membership should be addressed to Wm. Meggatt, chairman membership committee, Wethersfield Conn.

MR. ALBERT DICKINSON has returned from a vacation in Florida.

J. E. NORTHRUP made a flying visit to Washington and New York last week.

MAJ. CHAS. P. BRASLAN will leave Minneapolis for a California trip this week.

DANIEL DE COU, representing S. L. Allen & Co., has just returned from Australia.

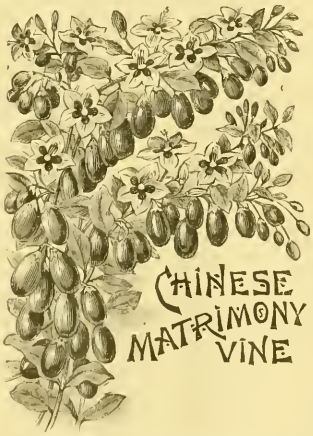
MR. D. I. BUSHNELL, of St. Louis has just made a business trip through Canada and the Northwest.

CAPE VINCENT, N. Y.—The John H. Allan Seed Co. has increased its capital stock from $20,000 to $35,000.

ANOTHER GROWER reports beet and cabbage about two-thirds of a crop, with carrot, onion and parsnip looking fairly well.

LONDON REPORTS of April 12th indicate an unprecedented drought in the seed growing districts in France and England.

MR. HENRY A. SALZER has been confined to his house for a few days. Business has been good, and plant department still badly over-crowded.



. . We have grown a large stock of plants of this superb novelty, and offer strong, well-established plants of it, 6 to 9 inches high, in 2½ inch pots, at . . . . . .

$5.00 per 100; $40.00 per 1,000.

J. T. LOVETT CO.

LITTLE SILVER, N. J.

GLASS. ROCK BOTTOM PRICES. Send for Estimate. Satisfaction Guaranteed.
REED GLASS CO.,
65 Warren St., and 46, 48 & 50 College Place, New York City.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

ONLY 150 CASES LEFT—50 BULBS IN EACH.

JAPAN LILIES Direct from Japan

Quality and Perfect Bulbs Guaranteed, as each case is examined before shipment.

We will close out the balance of our large importation at the following reduced prices:

Per Case, $6.00; 5 cases at $5.50, or 10 cases at $5.00.

Lilium Auratum (Golden), sizes 10 to 11 inches in circumference.
Lilium Speciosum Rubrum (Red), sizes 10 to 12 inches in circumference.
Lilium Speciosum Album (White), sizes 9 to 11 inches in circumference.

ROBERT BUIST, IMPORTER AND GROWER,
Stores, 922 & 924 Market St. PHILADELPHIA, PA.

WE SELL SEEDS
TO FLORISTS AND DEALERS.
WEEBER & DON,
SEED MERCHANTS AND GROWERS,
114 Chambers St., New York.
Catalogues on Application.

R. VAN DER SCHOOT & SON,
HILLEGOM, - HOLLAND,
Largest Growers of
HYACINTHS, TULIPS, NARCISSUS,
SPIRÆA, LILIES OF THE VALLEY, ETC.
HEADQUARTERS FOR HIGH GRADE FORCING BULBS.
Wholesale Importers should write us for Prices.
OUR NEW TRADE LIST NOW READY.

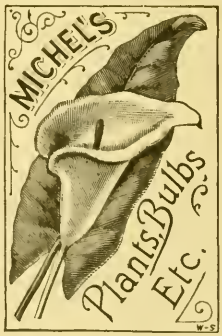
BENJAMIN RIMBAUD, BULB GROWER,
Quartier du Temple, Toulon, var, France.
Cable address Benrimbaud, Toulon.

The largest cultures in the South of France, of WHITE ROMAN HYACINTHS, Narcissus Paper White grandiflora, N. Double Roman, N. Double Von Sion, true pure yellow, and other Daffodils. Lilium Candidum, the largest bulbs. Freesias. Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A. Double Rosette the earliest, etc. Prices on application.

LILIUM HARRISII.
Original and largest growers of this important bulb.
OUR SPECIALTY!
True Stock. Lowest Prices. Best Quality.
F. R. PIERSON CO.,
TARRYTOWN-ON-HUDSON, NEW YORK.

New Hardy Russian Violets.
Rooted Runners at $2 per 100 by mail; 500 by express, $8.00. Cash with order.
A. & G. ROSBACH,
PEMBERTON, N. J.

10,000 ROOTED COLEUS
of leading bedders. Salvia Splendens, Double Alyssum, and other bedding stuff in variety, also 5,000 Double English Daisies, at $1.50 per 100, $10 per 1,000; Coleus, 85c per 100, $7 per 1,000; Salvias, $1 per 100; Alyssum, 50c per 100.
R. E. NACE, Royersford, Pa.



Write for wholesale list.
MICHEL PLANT AND BULB CO.,
ST. LOUIS, MO.

Lily of the Valley Bulbs.
THE STAR BRAND
SPECIALLY RECOMMENDED FOR LATE FORCING.
We are now booking Import orders for shipment from Hamburg in October or November.
REISS & BRADY,
280 Washington Street, New York.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

FORCING BULBS,

HYACINTHS, TULIPS, DAFFODILS,

And all other bulbs for forcing and outdoor, in very fine quality, at reasonable rates.

If any of our friends have not received a copy of our Catalogue of 1893, should write for one at once.

Please ORDER ON RECEIPT of our Catalogue.

SEGERS BROTHERS,

WHOLESALE BULB GROWERS,

LISSE, near Haarlem, **HOLLAND.**

HULSEBOSCH BROS.,

BULB AND PLANT GROWERS,

OVERVEEN, near Haarlem, HOLLAND.

	Per 100	1000
Lilium Harrisii, 4 to 5-inch in circ	$2.20	$19.00
" " 5 to 7-inch in circ	3.00	24.00
" " 7 to 9-inch in circ	5.25	47.00
" " 9 to 12-inch in circ	11.00	100.00
Lilium Longiflorum 10 per cent dearer than Lilium Harrisii.		
Roman Hyacinths, extra selected	2.50	22.00
" " top roots	3.00	25.00
Narcis. Totus Albus, extra selected	1.00	7.50
" " " Grandiflor'm, ext. s'le'd	1.50	11.00

Fall Wholesale Catalogue now ready. Address

A. HULSEBOSCH,

P. O Box 3118. Warehouse 58 West Street,

NEW YORK CITY.

DUTCH BULBS.

HYACINTHS, TULIPS, NARCISSUS, ETC. FIRST QUALITY IS THE BEST.

I have gained the reputation of having the finest bulbs of Holland, and if you would have the **VERY BEST** send me a trial order.

Two important items, viz:

Quality the Best. Prices the Lowest.

Price list free on application.

JOHN BARTH BOS,

Bulb grower. Established 1868.

Overveen near Haarlem, Holland.

Send for Catalogue of

JAPAN BULBS, SEEDS, AND SHRUBS.

ARAUCARIAS,

AUSTRALIAN Palm Seeds,

CALIFORNIA BULBS AND SEEDS to

H. H. BERGER & CO.

ESTABLISHED 1878. SAN FRANCISCO, CAL.

TUBEROSES.

☞ We are headquarters.

	Per 100.	Per 1,000
1st size Dwarf Pearl	$1 50	$12 00
2d size "	80	6 50
1st size Tall Pearl	1 20	10 00
Gladioli, extra large, finest sorts	1 25	12 00

H. G. FAUST & CO.,

64 and 66 N. Front St., PHILADELPHIA, PA.

WOODLAWN FARMS, 1,300 ACRES.

BULBS FOR 1893 FOR FORCING.

HYACINTHS, TULIPS AND CROCUS

Mr. Lomaus makes the following special offers—**Our Selection.**

Lot 1.—70,000 bulbs for $850.00
Lot 2.—14,000 bulbs for 170.00
Lot 3.—7,000 bulbs for . . . . . $ 86.00
Lot 4.—3,500 bulbs for 44.00
Lot 5.—1,750 bulbs for . . . . . $23.00.

Prices are F. O. B. Haarlem, Holland. Add 15 per cent. to above prices if delivered from New York.

Lists upon application, Address all orders to—

SEEDS H. A. DAACKE BULBS

410 W. Fourteenth St. NEW YORK.

GT. VAN WAVEREN & KRUYFF,

—Special Growers of—

Dutch Bulbs & Flower Roots.

Mr. Gerard Kruyff has come personally to make a trip through the United States, to contract with buyers, and offers a large stock of first quality goods. Parties interested in the Bulb trade are requested to correspond. Send lists for estimates to

Gerard Kruyff,

ASHLAND HOUSE, FOURTH AVE., NEW YORK CITY.

The Catalogue of Dutch Bulbs and Flower Roots

of **J. SCHILPZAND & SONS, HILLEGOM, HOLLAND,**

Is ready and can be had on application from their sole Agent,

C. RAOUX, 296 Pearl St., New York.

Fresh From Japan.

Sound Bulbs of

Lil. Auratum, 7 to 9 inch, $9.00 per 100.
Lil. Rubrum, 7 to 9 inch, $9.00 per 100.

Import prices on first class Fall Bulbs way down.

W. W. BARNARD & CO.,

6 and 8 N. Clark St. CHICAGO.

G. J. MOFFATT,

Manufacturer of

PAPER BAGS AND ENVELOPES

Special attention given to

Seed Bags and Catalogue Envelopes.

NEW HAVEN. CONN.

OBITUARY.

Dr. H. W. Williams.

Dr. H. W. Williams, of the firm of H. W. Williams & Sons, died at his home, Batavia, Ill. April 1. Dr. Williams was born in Massachusetts in 1817. While he was still an infant his parents settled in Ohio, where was educated, graduating from Western Reserve College and the Cleveland Medical School.

In 1848 Dr. Williams settled in Batavia, where he built up a large practice as a physician. But on account of ill-health he gradually dropped his profession, and went into the greenhouse, nursery and plant business. He started some thirty years ago with one small greenhouse, heated by a cook stove, which gradually expanded into the present extensive range of glass. He also handled all sorts of florists' supplies.

Dr. Williams was never a man of robust health, yet he lived a long and active life, built up a large business, and was active in social and religious circles. He is sincerely mourned by a large circle, whose sympathies are with Miss Alice and Mr. Ogden Williams, the only surviving members of the family.

Catalogues Received.

Van Zanten Bros., Hillegom, Holland, Dutch bulbs; John Laing & Sons, London, Eng., clivias; L. Boehmer & Co., Yokohama, Japan, Japanese bulbs and plants; Horace Rimby, Collegeville, Pa., plants; Luther Burbank, Santa Rosa, Cal., ornamental and fruit plant novelties; W. J. Hesser, Plattsmouth, Neb., decorative plants; J. H. Wade & Co., Evansville, Ind., plants and bulbs; H. A. Daacke, New York, bulbs; Gt. Van Waveren & Kruyff, Sassenheim, Holland, Dutch bulbs; Wm. Paul & Sons, Waltham Cross, Herts, Eng., roses; W. & J. Birkenhead, Sale, Manchester, Eng., ferns.

Send to
THE MOON
Company
For Your { Trees, Shrubs, Vines, and Small Fruits.
THE WM. H. MOON CO., Morrisville, Pa.

ROOTED CUTTINGS.
Marie Louise Violets, healthy stock.
Carnations in 2½ inch pots, Lizzie McGowan, Hinze's White and Portia.
E. P. HOSTETTER, Manheim, Pa.

COLEUS AND GERANIUMS
Cuttings and potted plants.
Wholesale and Retail. . . . .
CHAS. A. BAIRD, Manalapan, Mon. Co., N. J.

Always mention the American Florist when writing to advertisers.

THE NEW WHITE CARNATION
GOV. RUSSELL
A SEEDLING OF 1888.
NOW READY FOR DISTRIBUTION.
Price of Rooted Cuttings: Per 1000, $80; 500 at 1000 rate; per 100, $10; 25 or less, $2 per doz.
ORDERS WILL BE FILLED STRICTLY IN ROTATION.
FOR SALE BY
N. F. McCARTHY & CO., 1 Music Hall Place, Boston, Mass.
C. J. PENNOCK, Kennett Square, Pa.
AUGUST ROLKER & SONS, New York.
and E. H. HUNT, 79 Lake Street, Chicago.
PLANTS CAN BE SEEN AT THE ESTABLISHMENTS OF ANY OF THE ABOVE NAMED

Asparagus Plumosus Nanus.
CUT STRINGS; 6 to 8 feet long, 50 cents each. 10 to 15 feet long, $1.00 each.
In large or small quantities all the year round. The largest stock in the country.
W. H. ELLIOTT, Brighton, Mass.

GROZY CANNAS.
WE ARE HEADQUARTERS . . for all the Novelties, and in addition control EXCLUSIVELY several grand varieties which we now offer for the first time. We will not be undersold on any of the list.
J. C. VAUGHAN,
New York: 26 Barclay Street. CHICAGO. P. O. Box 688.
Greenhouses: Western Springs. . . .

Siebrecht & Wadley,
ROSE HILL NURSERIES,
NEW ROCHELLE, N. Y.

Palms, ORCHIDS, Roses, and New Plants.
FRESH DRACAENA CANES NOW READY.

ORCHIDS.
The Finest Stock in the World.
SANDER'S, ST. ALBANS, ENGLAND.
Thirty minutes from London.
Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City

TRY DREER'S GARDEN SEEDS, Plants, Bulbs & Requisites.
They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.
HENRY A. DREER, Philadelphia, Pa.

Don't Wait
till the minute you want them, but place your order for
Coleus
NOW. We are sold two weeks ahead of delivery. All the best kinds, including "Sunrise," the new yellow.
Send for list.
ALEX. McBRIDE, Alplaus, N. Y.

COLEUS, ROOTED,
Leading varieties, $1 per 100; $8 per 1,000, including the finest yellow Coleus in cultivation; a new variety, equal to Golden Bedder in color, and as good a grower as Verschaffeltii.
—PANSIES—
Fall Seedlings, a splendid strain, $5 a 1,000; 500 at 1,000 rates. 10c per 100 extra where shipped by mail.
JAMES HORAN,
FLORIST, BRIDGEPORT, CT.

* Rooted Cuttings. *
COLEUS FOR YOU ALL!
Golden Bedder and Crimson Verschaffeltii specialties, $8.00 per 1000. Fuchsias, Storm King, Moles Worth, E. G. Hill, Phenomenal, Jupiter, Black Prince, and others, $1.00 per 100. Ageratums, dwarf, blue and white, 75c per 100. Heliotrope, 4 sorts, $1.00 per 100. Few fine Standard Dwarf, $1.00 per 100, from flats $1.50. Pansies, Hybrid, Butterfly and Trimardeau, seed bed, 40c per 100; transplanted, 60c per hundred.
CASH WITH ORDER.
J. E. FELTHOUSEN,
SCHENECTADY, N. Y.

Tuberous Begonias.
Seedling Plants Now Ready.
Best Single or Double ones, colors mixed, mailed at $3.00 per 100. A different strain at $2.50, single only. We have a few good sound tubers left. Write us if you want any.
BRAUER & RICHTER
. . MCCONNELSVILLE, O.

MAMMOTH PANSIES.
First size in bloom, $3.00 per 100.
Second size in bloom, $2.00 per 100.
Third size in bud, $1.50 per 100.
Ampelopsis Veitchii, 3½ inch pots, $6.00 per 100.
Ampelopsis Veitchii 5 inch $9.00 per 100.
Chrysanthemums, 2½ inch $4.00 per 100.
Address—
J. G. BURROW, Fishkill, N. Y.

SURPLUS STOCK. *Per 100*

Alternanthera, 3 varieties, ($25.00 per 1,000)	$ 3.00
Achania Malvaviscus	5.00
Agathea Coelestis	2.50
Ageratum, blue and white	3.00
Alyssum, 3 varieties ($25.00 per 1,000)	3.00
Aloysia Citriodora	5.00
Balm, variegated	3.00
Begonias, Vernon and Listrl or Diadem	4.00
Begonias, Gloire de Lucerne and M. DeLesseps	6.00
Begonias, Argentea Guttata and Metallica	3.00
Cannas, named, our selection	5.00
Cuphea	2.50
Centaurea Gymnocarpa	3.00
Carnations, Golden Gate, Mrs. Fischer, Lizzie McGowan	4.00
Chœnostoma Hispida	3.00
Chrysanthemums, leading varieties	3.00
Coleus ($25.00 per 1,000)	3.00
Dahlias, large roots	8.00
Feverfew	4.00
Echeveria Metallica and Hoveyii	16.00
Echeveria, Secunda Glauca	2.50 and 3.50
Forget Me Not	3.00
Ficus Elastica, $5.00 per dozen.	
Fuchsias, E. G. Hill and Phenomenal	5.00
Fuchsias, in variety, our selection	3.00
Geraniums, Mme. Salleroi	3.00
Geraniums, Happy Thought, Mt. Snow	4.00
Geraniums, Ivy Leaved	3.00
Glechoma Hederaceo, var	4.00
Heliotrope, 2 varieties	4.00
Hoya Carnosa, 3½-inch	8.00
Hoya Carnosa, variegated	15.00
Hydrangeas, Red Branched, Thos. Hogg, Otaksa	4.00
Impatiens Mariana and Sultani	4.00
Ipomoea Moonflower, white and blue	4.00
Ivy, German	3.00
Leonotis Leonurus	4.00
Lobelia, blue	3.00
Manettia Vine	3.00
Marguerite, Daisy, white	4.00
Marguerite Daisy, single, yellow, $1.00 per dozen.	
Oxalis, pink	3.00
Pelargoniums, in variety	5.00
Passiflora, Constance Elliott	4.00
Passiflora, golden spotted (John Spaulding)	5.00
Mexican Primrose (1,000 for $25.00)	3.00
Plica Reptans	3.00
Plogyne Sauvis	4.00
Ruellia Formosa	4.00
Salvias	4.00
Smilax	3.00
Streptosolen Jamesonii	4.00
Tropæolum, Cardinal Prince	5.00
Verbenas, healthy stock	3.00

I. N. KRAMER & SON,
CEDAR RAPIDS AND MARION, IA.

ROOTED CUTTINGS.

Alternanthera, Versicolor, Tricolor and Aurea Nana	per 100	.50
Alternantheras Paronychioides	"	.75
Coleus, best old and new	"	$1.00
Fuchsia, leading varieties	"	1.50
Heliotrope, leading varieties	"	1.50
Mexican Primrose	"	1.50
Parlor Ivy, variegated	"	1.50

PLANTS.

Anthericum Picturatum	per doz.	$1.00
Fuchsia, Trailing Queen	"	.75
Begonia assorted	per 100	4.00
Coleus, assorted	"	3.00
Chrysanthemums, leading kinds, our selection	"	3.00
Heliotrope, assorted	"	3.00
Petunias, double, assorted	"	4.00
Anthemus Tinctoria, a good bloomer	"	4.00
Anthemus Coronaria	"	4.00
Solanum Jasminoides Grandiflora	"	4.00
" Jasminoides var	"	5.00
Var. Parlor Ivy	"	4.00
Fuchsia, best varieties	"	3.00
" Storm King and Phenomenal	"	4.00
Echeveria Glauca	"	4.00
" Extensa Globosa, for centers, plants six inches across	each	.25

Price List on Application

ROBT. S. BROWN & SONS,
Box 99, Kansas City, Mo.

TRAILING ARBUTUS

By the Basket, received daily from the woods.

WISCONSIN FLOWER EXCHANGE,
131 MASON STREET,
MILWAUKEE, WIS.

HEADQUARTERS FOR WATER-LILIES

SEED TUBERS AND PLANTS.

Place your orders early if you wish to secure good stock of charming yellow Water Lily, N. Chromatella plants. 1st size, $1.00 each, $10 doz.; 2d size, 75c each, $8.00 per doz. Also, the new French and other new hardy varieties. Send for price list.

Wm. Tricker, DONGAN HILLS, NEW YORK.

How Are You, Snow Crest?

CUT BLOOMS 50 CENTS PER HUNDRED.

Well, they say we are the best,
For all who see us like us,
And so far we've stood every test
Or otherwise they'd bike us.
We will come your plant to grace
For seventy cents per dozen
Send order now to Gibson's place.
We'll come next day a buzzin'.

50,000 now ready strong rooted cuttings, $2.00 per 100. Full budded and blooming for immediate sales and bedding out. Strong and stocky, $4.00 per 100; $35.00 per 1,000; 500 at 1,000 rates.

Florists double white forcing petunias, small plants, $3.00 per 100.

Gibson's hybrid pansy, small plants 50c per dozen.

Golden Marguerites, Gem Feverfew, Lobelia, trailing and dwarf, and mixed vase and bedding plants, rooted, $1.00 small plants, $2.00 per 100. Vincas from flats $2.00 per 100. Eulalia, China and Japonica 4 inch size, $3.00. 5 and 6 $5.00 per 100. Satisfaction guaranteed or money refunded.

Address, cash with order please

J. C. GIBSON, Woodbury, N. J.

ELEAGNUS LONGIPES HARDY ORANGE

(Citrus Trifoliata).

AN IMMENSE STOCK OF BOTH 1 AND 2 YEAR OLD PLANTS.

Hardy Orange, 1 year, 10 to 15 inch, $3.00 per 100; $25.00 per 1,000. Hardy Orange, 2 years, 18 to 24 inches, branched, $5.00 per 100; $40.00 per 1,000. Eleagnus Longipes, 1 year, $8.00 per 100; $75.00 per 1,000. Eleagnus Longipes, 2 years, 2 to 2½ feet, branched, $12.00 per 100; $100.00 per 1,000. Orders by telegraph promptly executed.

J. T. LOVETT CO., Little Silver, N. J.

20,000 VERBENAS.

THE CHOICEST VARIETIES IN CULTIVATION.

Fine pot plants, $2.50 per 100; $20 00 per 1000.

NO RUST OR MILDEW.

Packed light, and satisfaction guaranteed. Send for circular. . . .

Our sales reached nearly 250,000 last year, and we can assure our customers that our plants are fully equal, and assortment of varieties surpass those of last year.

J. L. DILLON, Bloomsburg, Pa.

ROSES AND CARNATIONS.

The Largest and Finest Stock in the Northwest ever offered at the following prices:

ROSES—Perles, Hoste, Sunset, La France, Mermet, Bride, C. Soupert, Niphetos, from 2½-inch pots	$4.00 per 100
Mme. Watteville, Albany, Pierre Guillot, Meteor, from 2½-inch pots	5.00 per 100
American Beauty, from 2½-inch pots	7.00 per 100
CARNATIONS—Silver Spray, Lizzie McGowan, Hinze's White, Hector, Portia, Garfield, Grace Wilder, Fred. Creighton, Mrs. E. G. Hill, from 2-inch pots	3.00 per 100
Rooted Cuttings of all varieties offered	2.00 per 100

Cut Flowers, Roses, Carnations Lilium Harrisii and Smilax at lowest market prices. Telegraph orders promptly attended to. CHRIST HANSEN, Wholesale Florist ST. PAUL, MINN.

Denver.

Mr. Rushmore, one of the pioneers in horticulture of this state, has taken charge of D. S. Grimes' place. Hardy roses is the specialty.

The new store that is being fitted up on 16th street is a mystery as yet; it has not been named. It now looks as if it was to be the finest in town. Sixteenth street has now eight retail stores, and by the way they are crowding together it looks as if it would equal Tremont street, Boston, very soon.

The Colorado Nursery Co., Mr. Arthur, foreman, is improving every branch this year. We will not need to ship much longer with this company in Denver, and Stark Bros. at Littleton.

Carnations are away ahead of the demand, and some are going begging. Otherwise prices are holding up well.

Mr. Avery Gallup is back from his spring trip east, and with him numerous boxes for the greenhouse. He seemingly wants all that is new.

The plant trade is on in earnest, but not as heavy as formerly. Everyone goes to Chicago this summer and yards must suffer. LYLE.

Milwaukee, Wis.

Mrs. Geo. Volk, wife of Geo. Volk, the florist who failed a short time ago, has opened up a florist window in Ladd & Jansen's drug store, cor. Milwaukee and Wisconsin Sts. Volk is working for her on a salary, which cannot be garnisheed, as he is a married man. The greenhouses and property which were sold a short time before he failed have been bought by Mrs. Volk.

Benj. Gregory will remove May 1 to a store on Grand Ave. in the Plankinton Block.

The Paris Floral Co., F. Foster, Mgr., will remove May 1 to 79 Wisconsin St.

Miss Katherine L. J. Edlefsen, daughter of Wm. Edlefsen, was recently married to Mr. Wm. S. Scott of Pittsburg. The floral decorations at the wedding were very handsome. Mr. Edefsen is building new greenhouses at North Milwaukee which he will run in connection with his present plant. He has taken his new son-in-law into partnership. E.

MR. WM. STAHL of Quincy, Illinois, the manufacturer of spraying outfits, has published a number of neat little pamphlets on subjects connected with spraying. Though intended for free distribution they contain much useful matter.

Association "Flora"
BOSKOOP, HOLLAND.

Now on hand in New York:
CLEMATIS, 3 Years, per 100, $30.00
H. P. ROSES, for forcing, " 9.00
In the best variety, as Alfred Colomb, Anna de Diesbach, B. Rothschild, Fisher Holmes, Gen. Jack, La France, Mme. G. Luizet, Mme. Plantier, Magna Charta, Paul Neyron, P. C. de Rohan, Merville de Lyon, Perle des Blanches, Ulrich Brunner and other sorts. Azaleas, Rhododendrons, Spiræas, etc. We also have Palms, Dracænas, Arancarias and Bay Trees at our nurseries in Holland. Catalogue on application.

P. OUWERKERK, 206 Cambridge Ave., JERSEY CITY, N. J.

MAGNOLIAS
OBOVATA GRACILIS AND PURPUREA.
Fine, bushy plants, 3 to 8 feet, from $25.00 to $200.00 per 100.
Send for descriptive catalogue and wholesale price list free to all in the trade.
SAMUEL C. MOON,
MORRISVILLE, Bucks Co., PA.

The three leading Florist Flowers:
CHRYSANTHEMUMS, CARNATIONS AND ROSES.
ALL THE NEW AND SELECTED STANDARD VARIETIES. . . .
My stock of all are as fine as can be produced at reasonable rates.
Complete list of these will be mailed to all applicants in the trade.
JOHN N. MAY, Summit, N. J.
Mention American Florist.

CHRYSANTHEMUMS.
NOVELTIES AND STANDARD VARIETIES.
Lowest price on application.
NATHAN SMITH & SON,
167 W. Maumee Street, ADRIAN, MICH.

Established Orchids.
CATTLEYA TRIANÆ, fine selected stock, well established in 6 inch pots, and will produce four to eight flowers each next winter. Many of them are very choice varieties. Single plants, $2.50, twelve for $25, one hundred for $175. CATT. GASKELLIANA, extra well furnished plants in fine condition, and will produce in June next 6 to 10 flowers each. Single plants, $2.50, twelve for $25. CATT. MOSSIÆ, the finest cattleya for color and size yet introduced. Splendid plants, well furnished with flower sheaths and will produce 6 to 10 flowers each plant in May. $3 each or $30 per dozen. A large consignment of EAST INDIAN ORCHIDS will shortly arrive. Among them will be a grand lot of Cypripedium Insigne, collected in the original district from which all the choicest varieties have come. Also Dendrobium Nobile, Dendrobium Farmerii, Dendrobium Chrysotoxum, Dendrobium, Thyrsiflorum, Dendrobium Aureum Dendrobium Densiflorum, Dendrobium Devonianum, Dendrobium Cambridgeanum and other choice species. Particulars later.
IG. FORSTERMAN, NEWTOWN, N. Y.

Rooted Cuttings of Evergreens, Hardy Flowering Shrubs and Hardy Perennials (Achillea, iberis, etc.) raised on contract for spring delivery. SEND LIST OF WANTS.
. . . ISAAC C. ROGERS, MOORESTOWN, N. J.

Grevillea Robusta
OR "AUSTRALIAN SILK OAK."
Splendid plants in two-inch pots, ready to shift. Price $1 per 100; $35 per 1,000.
PIKE & ELLSWORTH,
JESSAMINE, FLORIDA.

DO YOU WANT ANY?

	Per 100.	Per 1000.
Ivies English, one year old	$5 00	$40 00
Alternantheras, red or yellow	3 00	25 00
Echeveria Glauca, 2-2½-inch diam.	3 00	25 00
Daisies, hardy red or white	3 00	25 00
Pansies, strong plants, good strain	3 00	25 00
Coleus, rooted Golden bedder and Verschaffeltii	1 00	7 50

Sweet Pea seed, our own growing, finest varieties mixed 65c. per pound. (Cash must accompany all orders.)
JOHN RECK, Bridgeport, Conn.

Cyclamens.

	Doz.	Hundred.
Select strains, in 3½-in pots	$1.00	$8.00
H. P. Roses. Select named kinds	1.50	10.00
Salvias, sturdy, well-hardened Seedlings, per thousand,	6.00	.75

CLEMATIS.
Strong 2 and 3 year plants, own growing, leading kinds, $3.00 and $4.00 per dozen.
F. A. BALLER,
BLOOMINGTON, ILL.

NEW BEDDING BEGONIA
THURSTONII.
Strong plants, $1.00 per dozen; $6.00 per hundred.
J. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

Healthy rooted runners Marie Louise Violets, 90c per 100, $5.00 per 1,000.
Phebe A. Baker, Media, Delaware Co., Pa.

C. C. Abel & Company
P. O. Box 920, NEW YORK,
FLORIST'S, NURSERYMEN'S AND SEEDSMEN'S AGENTS,
— For the following —
WELL KNOWN AND RELIABLE HOUSES,
For whom we solicit your orders:

C. G. VAN TUBERGEN, Jr., Florist and Seedsman, Haarlem, Holland. Choice Dutch Bulbs, Novelties, etc.

PIERRE SEBIRE & SONS, Nurserymen, Ussy, France. Roses, Evergreens, Fruit and Forest stocks.

ERNST RIEMSCHNEIDER, Florist and Seedsman, Altona, Germany. Berlin Lily of the Valley a specialty.

ERNEST RIEMSCHNEIDER, Florist and Seedsman, Altona, Germany. Choice selections of German Flower Seeds. Also of Palms, Grass and Garden Seeds. Best Sugar Beet Seeds a Specialty.

Catalogues (mention which) free on application when received for distribution.
All orders for these houses should be plainly written and addressed to us.

VERBENAS, $20.00 per 1,000. 2.50 per 100.
Alternantheras, $25.00 per 1,000; $3.00 per 100.
Coleus, Centauria, Alyssum, $2.50 per 100.
Pelargonium, F. Dorner, fine stock, $10.00 per 100.
Roses, fine stock leading forcing varieties.
JOSEPH HEINL, Jacksonville, Ill.
Mention American Florist

STRONG PLANTS OF CARNATIONS.

Fine stock, ready now. Special prices on large lots. Terms, cash with order.

	Per 100 Root'd Cutt'gs	Per 100 Strong Plants
Daybreak, flesh pink	$3.00	$6.00
Tidal Wave, carmine	2.00	4.00
Grace Wilder, bright pink	1.50	4.00
Silver Spray, white	2.00	4.00
Hector, scarlet	2.00	4.00
Buttercup, good yellow	4.00	6.00
Lizzie McGowan, white	2.00	4.00
Crimson Coronet	3.00	6.00
J. J. Harrison, variegated	2.00	4.00
Ferdinand Mangold, crimson	3.00	6.00
Golden Triumph, light yellow	4.00	6.00
Fred Dorner, scarlet	3.00	6.00
Nellie Lewis, variegated	2.00	4.00
Portia, scarlet	1.50	3.00
Ben Hur, clear pink	4.00	6.00
White Dove, pure white	3.00	5.00
Nancy Hanks, clear pink	4.00	6.00
Aurora, bright pink	3.00	6.00
Prest. Garfield, scarlet	1.50	4.00
Emily Pierson, scarlet	4.00	6.00
Peachblow Coronet, blotched	3.00	5.00
Puritan, white	3.00	5.00
Wm. Scott, clear pink	10.00	15.00
Mad. Albertini, light pink	10.00	15.00
Mrs. E. Reynolds, bright pink	10.00	15.00
Richmond, brilliant carmine	10.00	15.00
Blanche, white	10.00	15.00
Edna Craig, clear pink	12.00	15.00
New Jersey, scarlet	12.00	15.00
Ida McKinley, salmon pink	10.00	12.00

GEORGE HANCOCK, Grand Haven, Mich

CARNATIONS

ROOTED CUTTINGS.

Puritan, Aurora, Golden Triumph, Grace Darling, Daybreak, Pearl, White Wings, Lizzie McGowan, Louise Porsch, W. F. Dreer, J. R. Freeman,

and many other varieties; fine, healthy stock, ready January and after.

HYBRID PERPETUAL ROSES

500 Paul Neyron, strong plants....$10.00 per 100.
20 other leading varieties ... 10.00 per 100.
$90.00 per 1,000.

Send for price list.

WOOD BROTHERS,
Fishkill, N. Y.

W. R. SHELMIRE,

Carnation Grower

AVONDALE, CHESTER CO., PA.

Send for price list of Rooted Cuttings.

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

CARNATIONS

ROOTED CUTTINGS.

Send for Price List of all the leading varieties.

WM. SWAYNE,
P. O Box 226. KENNETT SQUARE. Chester Co., Pa.

GRACE BATTLES

and over 60 other varieties of

CARNATIONS

offered the Wholesale Trade.

My list embraces the best Standard and New kinds, including some of particular interest to growers of seedlings. Correspondence and personal inspection solicited. **C. J. PENNOCK,**

The Pines, Kennett Square, Chester Co. Pa.

CARNATION CUTTINGS.

Healthy stock, well rooted, ready to ship now.

Hinze's White	per 100, $1.25; per 1000, $10.00	
Grace Wilder	" 1.50; "	12.50
W. F. Dreer	" 2.50;	

THOMAS DeWITT,
(Successor to DeWitt Bros.) **BRISTOL, PA.**

Always mention the AMERCAN FLORIST when writing to advertisers.

Orders Booked Now for My Specialties

FOR 1893.

New Jersey.—A scarlet Carnation hard to beat.....$12.00 per 100

Old Rose.—Old rose pink Carnation. .....$12.00 per 100

Nellie Bowden.—Pure bright yellow Canna.....$60.00 per 100

READY IN FEBRUARY.

Other varieties of Carnations, both old and new

JOHN McGOWAN,
• • • • • • ORANGE, N. J.

CUTTINGS

Carnations- Lizzie McGowan, Grace Darling and Aurora.
French Canna—A fine assortment of the best varieties only at $1.50 per 100, or $35.00 per 1000.
Seedling Verbena, Mammoth Strain—Select and finest colors, good stocky plants at $1.00 per 100.

Terms Cash. Correspondence Solicited.

ALBERT M. HERR, Lock Box 496, **Lancaster, Pa.**

SEE OUR PRICE LIST

in special carnation number of Jan. 19th, or address

EDW. SWAYNE, Carnationist,
. . . Kennett Square, Pa.

Rooted Carnation Cuttings.

WHOLESALE PRICE LIST NOW READY,

Containing a full list of best new and old sorts, including the Prize takers at MADISON SQUARE and PHILADELPHIA.

Address **H. E. CHITTY, Paterson, N. J.**

ROOTED CUTTINGS

Of the Best Old and Most Promising new varieties of

CARNATIONS.

Write for a catalogue and send list of wants for an estimate.

J. J. Styer,
CONCORDVILLE, PA.

ROOTED CUTTINGS

GOOD ONES.

Verbenas, 22 varieties	per 1000, $8.00, per 100,	$ .90
Coleus, 12 varieties	"	1.00
Double Alyssum	"	.75
Chrysanthemums, 40 varieties	per doz.	.20
Fuchsias, 10 varieties	"	.20
Heliotrope, 4 varieties	"	.20
Cigar Plant	"	.20
Manettia Vine and Mexican Primrose	"	.25

I. L. PILLSBURY, Macomb, Ill.

ROOTED CUTTINGS of CARNATIONS

By the Wholesale.

Ready now. This is the best time for intending buyers to supply themselves. offer them at moderate prices. Send for Price List. Address

JOSEPH RENARD, Unionville, Chester Co., Pa.

DO YOU WANT

BEDDING PLANTS?

Geraniums,	Alyssum,
Coleus,	Heliotrope,
Achyranthus,	Stocks,
Asters,	Lobelia,
Thyme,	Daisies,
Petunias,	Candytuft,
Vines,	Mignonette,
Alternanthera,	Begonias,
Dianthus,	Verbenas,
Feverfew,	Etc., Etc., Etc.

If so, send for prices to the

ELGIN ROSE CO.,
TELEPHONE 8.
519 Chicago Street, - - ELGIN, ILL.

"CHRYS-COLA"

ROOTED COLEUS

Verschaffeltii, J. Goode, Golden Verschaffeltii, Yeddo, Firebrand, Chicago Bedder, Chapmani.

75c. per 100, $6.00 per 1000.

Cash with order.

S. B. FIELD, Roselle, N. J.

E. G. HILL & CO.,

Wholesale Florists,

RICHMOND, INDIANA.

Marie Louise Violets.

The Anchorage Rose Co. offers 50,000 Marie Louise Violets, well established in 2½ inch pots, absolutely free from disease, $25.00 per 1,000. First come first served.

Anchorage Rose Co.,
ANCHORAGE, KY.

25,000 PANSIES The Jennings strain; extra fine plants in bud and bloom, $2.00 per 100. Medium size plants, will flower soon, $1.00 per 100; $9.00 per 1,000. Extra small plants, September sowing, 60 cts. per 100 by mail; $5.00 per 1,000; extra fine for late blooming.

E. B. JENNINGS, Pansy Grower,
Lock Box 254. SOUTHPORT, CONN.

Cut Worms in Smilax Beds.

Five or six years ago I had charge of a place in Connecticut, and we were troubled with cut worms. At night I went around with a lantern holding the light behind the strings of smilax, when I could see the worms plainly. Some nights I would pick a pint or more from a bed thirty feet long by ten feet wide, and on dark days by digging around the plants.

At last as spring work was taking up so much of my time I could not watch the worms, and they got the best of the job. Then I got a small sized bag of table salt, sprinkled the bed with it and then gave the bed a good watering. After this application we were not troubled with worms again for some time. After applying, the smilax came up fine and healthy, while before it was brown and thin. After a month I gave it another dose with good results.

A. J.

Copied the Whole Catalogue.

It is not uncommon for one catalogue compiler to copy descriptions, and sometimes good sized sections, from some other firm's catalogue, but now we learn of a case in which the entire catalogue was copied bodily, the only change being in the firm name and address. Messrs. Segers Bros., of Lisse near Haarlem, Holland, were the victims, and a new bulb firm that evidently cared but little whether the catalogue fitted their stock or not, were the pirates.

Leaf Rollers.

In answer to several inquiries regarding leaf-rollers on roses we would say that Paris green in water, in the proportion of one pound of the poison to 160 gallons of water, is considered a good and effective destroyer of these pests when in larval state. It is also stated that toads are very fond of the leaf-rollers and are very useful in ridding a place of these and other injurious insects.

DO YOU WANT an alphabetical list of the chrysanthemums in commerce in America, with class and a brief accurate description of each one, and synonyms noted? You will find such a list in our new trade directory and reference book.

NEPONSET • FLOWER • POTS

of Waterproof Paper, light, durable, unbreakable and cheap.

Tomato Growers have used them with success and proved their appreciation by repeated orders.

Cabbage Growers have tried them and duplicated their orders.

Market Growers of Verbenas, Alyssum, Coleus and other plants, which do not shun moisture, have used them extensively in repeated seasons.

Recommended for light and safe packing of tender and valuable plants, for the marketing of Ferns, Dutch Bulbs, Lily of the valley and the like.

Cost about 40 per cent less than earthen pots, and weight considerably lighter, thus saving in first cost and freight.

For Price List and further particulars address

Wholesale Agents:

AUGUST ROLKER & SONS, Station E, New York.
R. & J. FARQUHAR, - - - - Boston, Mass.

Who furnish samples, by mail, postpaid, on receipt of

	10 cts.	11 cts.	14 cts.	17 cts.	22 cts.	40 cts.	60 cts.
For 1 dozen	2¼-in.	2½-in.	3-in.	3½-in.	4-in.	5-in.	6-inch pots.

F. W. BIRD & SONS, Sole Manufacturers, EAST WALPOLE, MASS.

GOODYEAR RUBBER CO.

ALL KINDS RUBBER GOODS.

We make a **SPECIALTY** in **GARDEN HOSE,** in both Rubber and Cotton.

A GREAT VARIETY OF HOSE REELS, SPRAY PIPES, SPRINKLERS, ETC.

141 Lake Street, CHICAGO.

Mention American Florist.

BOSTON FLORIST LETTER CO.,

13 Green Street, BOSTON, MASS.
Address all correspondence to 1 Music Hall Place.

Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1½-inch and 2-inch, $2 00 per 100. Patent fastener with each letter.

With orders for 500 letters we give away a nicely stained and varnished box. See cut in next week's American Florist.

Our letter is handled by all the wholesalers in Boston.

AGENTS: Marschuetz & Co., 25 N. 4th St., Philadelphia, Pa.; A. Rolker & Sons, New York; F. E. McAllister, 22 Dey St., N. Y.; E. Kaufman, Philadelphia; H. Bayersdorfer & Co., Philadelphia, Pa.; A. D. Perry & Co., 33 Warren St., Syracuse, N. Y.; A. C. Kendal, 116 Ontario St., Cleveland, O.; E. H. Hunt, 76 Lake St., Chicago; Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.; H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O.; T. W. Wood & Sons, 6th and Marshall Sts., Richmond, Va.; Jas. Vick's Sons, Rochester, N. Y.; Dan'l B. Long, Buffalo, N. Y.; C. A. Knehn, St. Louis.

J. A. Simmers, Toronto, Ont., Agt. for Canada.

W. C. KRICK'S

PATENT

Florists' Letters, Etc.

Highest Award wherever exhibited.

These Letters are made of the best immortelles, wired on wood or metal frames having holes drilled in them to insert toothpicks, by which to fasten them in the design. All infringements prosecuted.

2-inch Letters, $3 00 per 100. Postage, 15c. per 100.

Before purchasing send for free sample and Catalogue and compare with any other letter in the market.

W. C. KRICK, 1287 Broadway, BROOKLYN, N. Y.

Agents:—J. C. VAUGHAN, Chicago, Ill.; H. BAYERSDORFER & Co., Phila., Pa.; N. STEFFENS, N. Y.; AUG. ROLKER & SONS, N. Y.; ED. S. SCHMID, Washington, D. C.; JAMES VICK'S SONS, Rochester, N. Y.; T. W. WOOD & SONS, Richmond, Va.; J. A. SIMMERS, Toronto, Ont.

LITTLE'S ANTIPEST.

— A —

Valuable Discovery of the 19th Century.

SILVER MEDAL AWARDED

— BY THE —

CALIFORNIA STATE FAIR OF 1890.

This preparation is a sure destroyer of the **Scale, Wooly Aphis** and **Insect Pests** of any and all descriptions. It may be as freely used in the conservatory, garden and greenhouse as in the orchard or vineyard. It is non-poisonous and harmless to vegetation when diluted and used according to directions. It mixes instantly with cold water in any proportion. It is **Safe, Sure** and **Cheap.** No fruit grower or florist should be without it.

Send for Circulars and Price List.

R. W. CARMAN, General Agent,
291 AMITY STREET,
FLUSHING, Queens, Co., N. Y.

PLANT BED CLOTH.

CHEAP SUBSTITUTE FOR GLASS on Hot beds, Cold Frames, etc. Three grades.

Light, Medium, Heavy.

Used by Florists, Gardeners, etc., invaluable for Tobacco Growers. Protects from frost. Promotes, hardy, vigorous growth and keeps beds warm; will not shrink or mildew. For sale by the leading Dry Goods houses, Seedsmen, Florists, etc. Well known and extensively used. For circulars and samples apply

NATIONAL WATERPROOF FIBRE CO.,
50 South Street, - - NEW YORK.
Agents Wanted.

CUTS!

Wood Engraving,
Zinc Etching,
Half-Tone,
Wax Engraving, Photo-Engraving,
Designing.

MANZ & CO.,
183 Monroe Street, CHICAGO. ENGRAVERS.

FLORAL DESIGNS

The Cut Flower Worker's friend. Fine book of 160 pages. Send **$3.50** for it, to
J. HORACE McFARLAND, Harrisburg, Pa.

U. S. AND FOREIGN Trade Marks, Designs, Opinions, Searches, &c., promptly attended to. Send sketch or model for free examination as to patentability. All work strictly confidential.

PATENTS

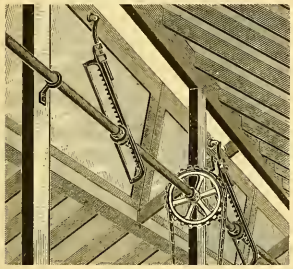
GEO. H. CHANDLEE,
Atlantic Building, WASHINGTON D. C.

Always mention the American Florist when writing to advertisers.

When writing to any of the advertisers on this page please mention the American Florist.

SEE HERE BROTHER FLORIST!

Arn't you tired going through your houses two o three times a day year after year and lifting your ven tilating sash one at a time and propping them up with sticks or pots, with a chance of having sash blown off and broken glass to pay for? If you are



We have got just the thing you need, the **Newest** and **Best** thing out. "The New Departure" for **about half** the cost of the old style. Send for Descriptive Catalogue to

J. D. CARMODY, Evansville, Ind.

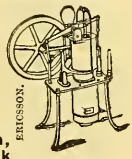
WATER

For Your GREEN HOUSE, ROSE HOUSE, NURSERY,

Conservatory, Lawn, House, Garden, Stock or any other purpose.

Send for Illustrated Catalogue OF THE

DE LAMATER-RIDER AND DE LAMATER-ERICSSON PUMPING ENGINE.



HOT-AIR PUMPING ENGINE.

Their operation is so simple and safe that a child can run them They will pump water from shallow streams or any kind of well. They can be arranged for any kind of fuel. Capacity 1,500 to 30,000 gallons of water a day, according to size.

The De Lamater Iron Works,
24-26 CORTLANDT ST.,
NEW YORK, N. Y.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaranteed.

CORRESPONDENCE SOLICITED.

Clear Cypress, from bottom gutter up is my specialty.

Lyman Felheim, ERIE, PA.

STANDARD VENTILATING MACHINERY,

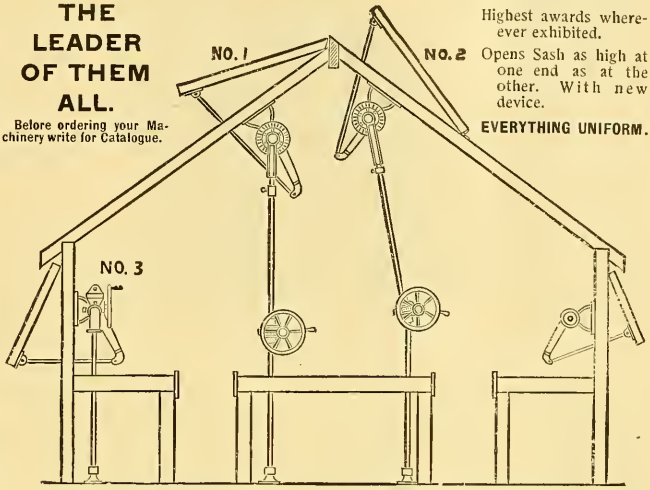
THE LEADER OF THEM ALL.

Before ordering your Machinery write for Catalogue.

Highest awards wherever exhibited.

Opens Sash as high at one end as at the other. With new device.

EVERYTHING UNIFORM.

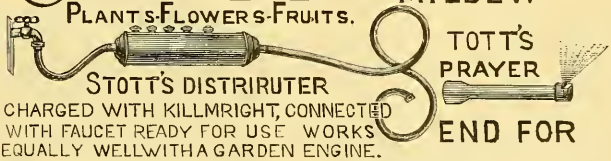


E. HIPPARD, YOUNGSTOWN, OHIO.

STOTT'S KILLMRIGHT

SYSTEM OF SPRAYING KILLS, INSECTS AND SAVES MILDEW

PLANTS-FLOWERS-FRUITS.



STOTT'S DISTRIBUTER CHARGED WITH KILLMRIGHT, CONNECTED WITH FAUCET READY FOR USE WORKS EQUALLY WELL WITH A GARDEN ENGINE.

STOTT'S SYRINGE

CELL "A" CONTAINS THE KILLMRIGHT

SEND FOR CIRCULAR AND TESTIMONIALS.

STOTT GARDEN IMPLEMENT COMPANY
136 LIBERTY ST. NEW YORK.

FLORISTS' HOSE

Made by E. W. Holt, member of the Society of American Florists.

SPECIAL OFFER ON ORDERS UNTIL MAY 15, 1893.
15 per cent—on the following—15 per cent.

¾-inch 3 ply Standard, 12c per foot. ¾-inch 3 ply XX 15c per foot. 4 ply 16c per foot. 4 ply XX 20c per foot. ½-inch hose 20 per cent less than above prices. 1-inch hose 20 per cent more than above prices.

SPECIAL—Armored Hose, ¾-inches, 12 and 15c net.

GOODYEAR RUBBER CO.
2 W. 14TH ST., NEW YORK.

Ice Boxes FOR FLORISTS.

All sizes and styles. Correspondence solicited.

KANKAKEE MFG. CO., Kankakee, Ill.
CHICAGO OFFICE: 266-268 Wabash Ave.

THE PERFECT DRAINAGE

BENCH TILE

For circulars, etc., address

W. P. Wight, Upland Green Houses,
Send your business card. MADISON, N. J.

Foreign Notes.

At the opening of the Ghent Quinquennial Exposition the Syndicate des Horticulteurs Belges gave a reception to distinguished visitors in the great hall of the Hotel de Ville, on the evening of April 17.

Alphonse de Candolle, one of the most distinguished botanists of our time, died April 4 at Geneva, Switzerland. He was the son of Augustin de Candolle, also a distinguished botanist, and was born in Paris in 1806. He began his botanical labors as assistant to his father, who was Professor of Botany of the University of Geneva, a position to which he succeeded after his father's death. He was a member of many scientific societies and the author of a variety of botanical works. He was assisted by his son Casimir, thus showing the rather unusual example of three generations devoted to the study of systematic botany.

Cotton Plants.

The New York *Herald* prints the following tale:

Employed by a certain florist in Brooklyn there is a boy about whose future state no doubt need be entertained if he keeps on the way he is going. One day last week the florist had set forth his left over stock of Easter lilies and as the weather was cold he had, after the fashion of his kind, carefully wrapped every blossom in cotton batting. This boy was engaged in giving an imitation of work around the premises, when along came a visitor as to whose antecedents there could be no question. He was from the country, and very recently at that. The boy took his size with one glance, after a way boys have, and kept at work. The Easter lilies greatly took the fancy of the countryman, and after studying them attentively he touched the youth on the shoulder and said:

"Say, sonny, whatter them?"

"Cotton plants," said the boy, and kept stolidly at work.

"What, cotton plants? What they make clothes of?"

"Yes," said the boy, and never cracked a smile.

"Got 'em here for sale?" said the countryman.

"Been sold," said the boy, "bought by George Gould."

"Great Scott," said the countryman. "Is that so? How much?"

"Ten thousand dollars," said the little liar. "They're awful rare in winter."

The countryman looked for a moment at the boy's calmly innocent fac , but who could doubt that expression of guileless verity? "By gum!" he said, meditatively, and went slowly away.

"An invaluable weeding implement; once used; always used."

Breen's Patent Finger Spade

for weeding is conceded by competent authorities to be the best and most useful weeding implement extant. Worn with or without a glove, on either or both the fore and middle finger, weeding, etc. can be done much more expeditiously and better than with any other weeder.

RETAILS AT 10C EACH.

Wholesale, $7.00 per gross or 70c per dozen, delivered in any part of the U. S. or Canada. Half gross orders at gross rates, larger quantities at a reduction.

For circulars and further particulars, address the manufacturer, T. W. BREEN, 625 Mission St. Postal address P. O. box 2118. San Francisco, Cal.

THE BEST POTS.
THE CHEAPEST.
THE LOWEST FREIGHT RATES.
THE BEST OF PACKING.
THE LARGEST POTTERY IN THE STATE
FOR MAKING STANDARD FLOWER POTS.

PRICE LIST OF POTS.

	Per 1000		Per 100
2 inch	$ 3.25	6 inch	$ 2.20
2¼ "	3.50	7 "	3.50
2½ "	4.00	8 "	5.00
3 "	5.00	9 "	7.50
3½ "	7.25	10 "	10.00
4 "	9.00	11 "	15.00
5 "	13.80	12 "	20.00

Terms: Cash, free on board cars here. Address

HILFINGER BROS., Potters,
FORT EDWARD, N. Y.

Mention American Florist.

Mention American Florist.

THE "LOCKLAND"
Sash Bars
ARE ALWAYS SATISFACTORY.

This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.

GUTTER MATERIAL, RIDGES, SASH, ETC.
The finest CLEAR CYPRESS used.
Write for circulars and estimates.

LOCKLAND LUMBER CO.
Lockland, O.

"Standard" Flower Pots.

As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address

The Whilldin Pottery Company,

BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.

Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.

A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.

We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.

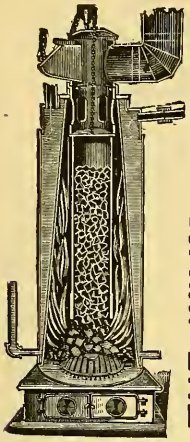
SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY,
Manufacturing the
ELVERSON, SHERWOOD & BARKER
STANDARD FLOWER POTS.

Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bud Pots, etc.

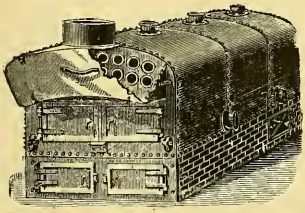
ADDRESS PITTSBURGH CLAY MF'G CO., New Brighton, Pa.

H. M. HOOKER COMPANY,
57 and 59 W. Randolph Street, CHICAGO,
NATURAL GAS MADE GLASS
FOR GREENHOUSES.
Write for latest prices.

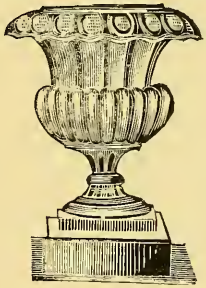


THE WILKS HEATER,
FOR HEATING
GREENHOUSES, STORES, DWELLINGS, ETC.
Manufactured by THE S. WILKS MF'G CO. 123 S. Clinton St., CHICAGO, ILL.
SEND FOR CATALOGUE.

KROESCHELL BROS.
IMPROVED
Greenhouse ×× Boiler,
41 to 55 Erie St., CHICAGO.



Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around front, sides and back). Write for information.



IRON
RESERVOIR VASES,
LAWN SETTEES,
AND CHAIRS,
ARE MANUFACTURED BY
McDONALD BROS.,
COLUMBUS, OHIO.
The largest manufacturers of these goods in the world.
We issue a large Illustrated Catalogue. Sent free on application.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

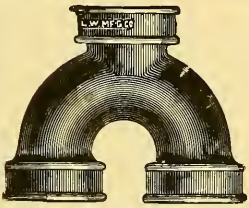
WEATHERED'S DOUBLE DOME BOILERS

Are the Very Best.
OUR
Patent Rocking
AND
Shaking
Grates
ARE
ABSOLUTELY PERFECT.
Being in the smallest sections are the least costly to keep in repair.
Send 3 Cents Postage for CATALOGUE and please mention this paper.

Proven by 40 years USE
Effective and Durable.
PATENT
Sash Raising
Apparatus.
ROSE HOUSES,
GREEN HOUSES, ETC.
of Iron Frame Construction, erected complete, or the Structural Iron Work shipped ready for erection.
Iron Frame Benches with Drainage Bench, Tile or Slate.

THOMAS W. WEATHERED'S SONS, (Incorporated) 244 CANAL ST., N. Y.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.
Pipe can be easily put together by any one, very little instruction being needed.

GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.
Mention American Florist.

L. WOLFF MFG. CO., 93 to 117 W. Lake Street, CHICAGO.
WRITE FOR ILLUSTRATED CIRCULAR.

Pat. 1882, '85, '86, '88, '90, '91.
FOR WATER, AIR, STEAM, ACIDS, OILS, LIQUORS, GAS, SUCTION,
And for any and every purpose for which a hose can be applied.
Sizes, ⅛-inch to 42 inches diameter.
The making, vending or use of any Serviceable Armored Wire Bound Hose not of our manufacture is an infringement on one or more of our Patents. The rights secured to us render each individual dealer or user responsible for such unlawful use with all the consequences thereof. For prices and discounts address WATERBURY RUBBER CO., Sole Mf'rs and Owners of all the *Sphincter Grip Armored Hose Patents*, 49 Warren Street, New York.
J. C. VAUGHAN, Agent, CHICAGO.

STANDARD HOSE MENDER.

The only Mender using ordinary galvanized wire No. 14, instead of expensive bands. Any person can handle it with perfect ease. Thousands in use and all testify to its Wonderful Merits
Sample Box, by Mail, 50 cts.
E. HIPPARD, Youngstown, Oh'o.

YOU CAN SAVE MONEY BY PURCHASING, AND GLASS BY USING
HAMILTON'S PATENT SASH LIFTER.
"It works like a charm." So say those who use it. Send us 50 cents for one sample and you will say so too.
BAY STATE HARDWARE CO.
272 Freeport Street, BOSTON, MASS.

J. N. STRUCK & BRO.
Manufacturers of
• CYPRESS •
Greenhouse Material,
LOUISVILLE, KY.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.
JOHN G. ESLER, Sec'y F. H. A., Saddle River, N. J.

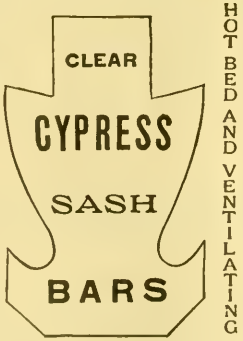
PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

Index to Advertisers.

Adv. Rates, etc.....1012
Abel C C & Co.....1018
Anchorage Rose Co.
..... 1011 1019
Asmus Ernst.....1011
Baird Chas A 1016
Baker Phebe A 1018
Baller F A.....1018
Barnard W W & Co...1015
Bay State Hdw Co...1023
Bayersdorfer H & Co .1012
Berger H H & Co.....1015
Bird F W & Son 1020
Boosall Jos E & Son ..1018
Bos John Barth 1015
Boston Letter Co ... 1020
Brauer & Richter.....1016
Breen Thomas W.....1022
Brown James, Jr..... 1011
Brown R S & Son.....1017
Bulst Robert 1014
Burns & Raynor.....1013
Burrow J G.....1016
Burton John.....1010 1011
Carman R W.....1020
Carmody J D.....1021
Chandlee Geo F 1020
Chitty H E.....1019
Coles W W 1010
Cook John.....1011
Corbrey T J & Co.....1013
Dancke H A. 1015
De Lamater Iron Wks1021
De Witt Thomas ... 1019
Dillon J L.....1017
Dreer H A.....1016
Elgin Rose Co 1019
Elliott W H.....1016
Ellison Wm.....1012
Faust H G & Co 1015
Felheim Lyman 1021
Felthouse J E.....1016
Field S B 1019
Forstermann I 1018
Freeman Lizzie.....1010
Gibson J C.....1017
Gonzalez & Co.....1010
Goodyear Rubber Co .
..... 1020 1021
Hall Ass'n.....1023
Hancock Geo 1019
Hansen Christ 1017
Hart James.....1013
Hart Michael A 1013
Hartford H E.....1012
Hiel Jos.....1018
Henderson John Co...1011
Herr Albert M.....1019
Hews A H & Co 1022
Hillinger Bros.....1022
Hill E G & Co.....1019
Hippard E 1021 1023
Hitchings & Co.....1024
Hooker H M Co. 1022
Horan Edw C 1013
Horan James.....1016
Hostetter E P 1016
Huisebosch Bros 1015
Hunt E H.....1013
Hunt M A.....1010
Hunter & Purdy 1013
Jennings E B 1019
Kankakee Mfg Co.....1021
Kaufmann Ernst & Co1012
Kemble Floral Co 1010
Kennicott Bros.....1013
Koffman E 1012
Kramer J N & Son....1017
Krick W C.....1020
Kroeschell Bros 1025
Kuehn C A.....1012
La Roche & Stahl.....1012
Lockland Lumber Co..1021
Lombard R T 1023
Long Dan'l R.....1013
Lonsdale Edwin.....1010
Lovett J T Co .. 1014 1017
McBride Alex.....1016
McCarthy N F & Co...
.....1010 1013
McCren & Cole 1010
McDonald Bros.....1025
McFarland J H.....1020
McFarland J H Co....1010
McGowan John. 1019
Manz J & Co.....1020
Marschuetz & Co.....1012
May John N.....1018
Meyer John C & Co. .1010
Michel Plant & Bulb
Co 1014
Milliang Bros.....1013
Moffatt G J.....1015
Moninger Jno C 1024
Moninger Samuel C.....1018
Moon Wm H Co. ...1016
Moore Frank L.....1011
Mullen Geo 1013
Nage R E 1014
Nanz & Neuner.....1011
National Fibre Co 1020
Niles Centre Floral Co1013
Olson M 1013
Ouwerkerk P.....1018
Peck & Sutherland.....1013
Pennock C J.....1019
Peacock Sam'l S 1012
Pierson F R Co. ...1014
Pike & Ellsworth 1018
Pillsbury I L 1019
Pittsburg Clay Mfg Co1022
Prince A F & Co.....1013
Randall A L 1023
Raoux C.....1015
Reck John 1018
Reed Glass Co 1014
Reed & Keller.....1020
Reiss & Brady.....1014
Renard Joseph.....1019
Rimbaud Benj..... 1014
Roberts D H.....1024
Roehrs Theo.....1013
Rogers Nurseries.....1018
Rolker A & Sons 1023
Rusbach A & G 1014
Russell Governor.....1016
Russell S J 1013
Salzer Seed Co. 1010
Sander & Co.....1016
Schulz Jacob.....1011
Segers Bros.....1015
Shelmire W R.....1015
Sheridan W F.....1013
Siebrecht & Wadley...1016
Simons R E.....1010
Siptle Doepfel & Co...1022
Situations, wants.....1010
Smith C A Floral Co..1011
Smith Nathan & Son..1018
Smith & Webster.....1024
Spooner Wm H.....1011
Stott Garden Imp Co..1021
Strauss C & Co 1011
Strack J N & Bro.....1023
Styer J J 1019
Sunderbruch H L.....1013
Swayne Edw 1019
Swayne Wm.....1019
Tilton Bros 1010
Tricker Wm.....1017
Vander Schoot R A
Son.....1014
Van Waveren &
Kruyff.....1015
Vaughan J C.....1016
Waterbury Rubber Co1023
Weatherels Sons T W1023
Weber & Don.....1014
Welch Bros 1013
Whilldin Pot Co 1022
Wight W P.....1021
Wilks S Mfg Co.....1023
Winter N D 1010
Wisconsin Flower Ex 1017
Wolff L Mfg Co.....1
Wood Bros.....

When writing to any of the advertisers on this page please mention the American Florist.

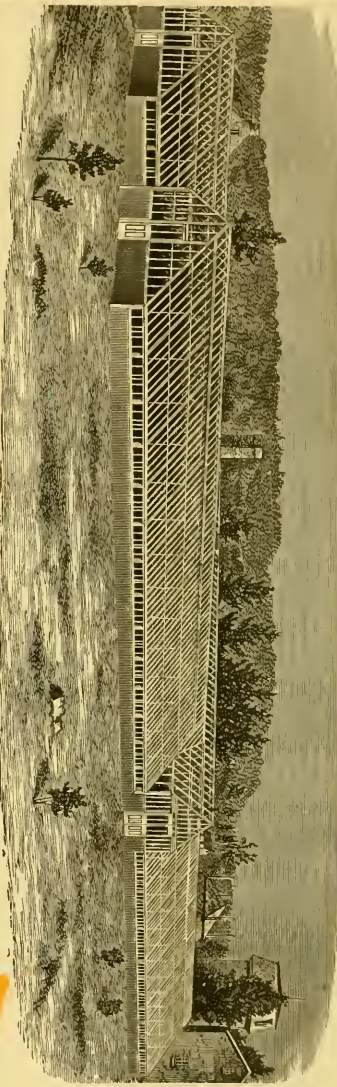
CYPRESS GREENHOUSE MATERIAL



HOT BED AND VENTILATING SASH

JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

HITCHINGS & CO.
ESTABLISHED 1844.
GREENHOUSE HEATING AND VENTILATING,
HORTICULTURAL ARCHITECTURE AND BUILDING.



COMMERCIAL ROSE AND GREENHOUSES, CONSERVATORIES, PALM HOUSES, ETC., CONSTRUCTED WITH POSTS, RAFTERS, PURLINS, GUTTERS, SILLS, COLUMNS AND BRACKETS, ALL OF IRON; AND GLASS BARS, VENTILATING SASH AND SIDING OF WOOD. ERECTED COMPLETE, OR THE STRUCTURAL IRON & SHIPPED READY FOR ERECTION WITH PLANS, DETAILS AND FULL INSTRUCTIONS TO ENABLE LOCAL MECHANICS TO COMPLETE THE SAME.

SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUES.

IRON BENCH FRAMES FOR SLATE OR WOOD TOPS.

HITCHINGS & CO., 233 Mercer Street, NEW YORK.

SMITH & WEBSTER,
MAKERS OF
GREENHOUSE PIPE
FOR HOT WATER AND STEAM,
193 Lake Street, - CHICAGO, ILL.

D. H. ROBERTS,
159 & 161 S. Fifth Ave., NEW YORK,
NATURAL GAS MADE GLASS
for ROSE HOUSES, CONSERVATORIES, Etc., Etc.
Our Glass received the Highest Award at the Boston Convention of the S. A. F.

Goodell Lib. Mass. Agri. Col. 15 Dec 93

THE AMERICAN FLORIST

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, MAY 4, 1893.** **No. 257**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company. Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,

322 Dearborn Street, CHICAGO.
Eastern Office: 67 Bromfield St., Boston.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis, Mo., August 9 to 12, 1893.

CONTENTS.

Rose cultivation 1025
Height of cannas 1026
Views in greenhouses of F. L. Ames (2 illus) . 1026
Miscellaneous seasonable hints 1027
Carnations—seasonable hints. 1028
—Number of blooms cut. 1028
—Carnation nomenclature 1028
Modern methods in growing tropical plants . 1028
Chrysanthemums—a few notes on 1030
World's Fair impressions 1031
New York. 1031
Philadelphia 1031
Boston 1032
Chicago 1032
News notes 1034
The seed trade 1038
Baltimore 1040
Brampton, Ont. 1040
St. Louis 1042
Toronto 1044
Cleveland 1046

THE WORLD'S FAIR is now open to the public and we are pleased to say that on the opening day the exhibits in the division of floriculture were more nearly complete than those of any other department of the Fair. The display is certainly a grand one and will unquestionably be of immense benefit to the trade. Just prior to the opening official action was taken which results practically in making floriculture a department of the Fair instead of a bureau of the department of horticulture. Hereafter Mr. Thorpe will report to and be responsible to the Director General direct and will be free from the necessity of consulting any other official. This clears from his path the cause of difficulties that have arisen in the past, and is official recognition of the great importance of floriculture as an exhibition feature and of the valuable services rendered by Mr. Thorpe.

PLEASE WRITE on your printed letter head when addressing our advertisers. If you have no printed letter head, then enclose your business card or bill head.

YOU CAN'T AFFORD to do business without a copy of our trade directory and reference book.

Rose Cultivation.

[Read before the Berkshire Co. Gardeners' and Florists' Club by A. P. Meredith.]

I question whether any other kindred subject has received so much attention as that of the cultivation of tea roses under glass. While not expecting to add any new material to what is already known I hope I may be able to refresh your memories on some things that are already known, but probably forgotten.

Commencing with the propagation of roses. I will assume that everybody has his established house of plants, and is looking for cuttings. Some growers prefer to take cuttings of flowering wood, that is, when making the daily cut of bloom it is customary to take the last two buds from the growth, for a cutting. Others are just as well satisfied to take blind wood and use for the same purpose. In the case of flowering wood it seems to be the prevailing idea that it increases the percentage of bloom for another season, while on the other hand blind wood is much more easily struck and generally makes as strong plants. But in my experience I must confess that I see no difference between flowering wood and blind wood in regard to the number of blooms cut. I am very much of the opinion that a rose is a rose whether struck from blind or flowering wood, and that if the plants are not well grown and strong and everything favorable for them, a grower is just as liable to meet with failure from flowering wood as from blind wood. It would be an easy matter to point out what would appear disadvantages in either case.

Now to propagation. The propagating bed should be of free sand with a bottom temperature of 65° to 70° or probably a little more, and surface temperature of 55° to 60°. Here there is one thing to be taken into consideration which is really an important factor in the striking of rose cuttings; that is to see your sand is properly firmed or beaten down before insertion of cuttings, also after, this latter being the most important point of the two, for if this precaution is not observed a cavity or open space is likely to be left underneath the cutting. Cuttings properly placed will usually strike root in from twenty to twenty-five days, improperly placed, from twenty-five to thirty, with a loss of probably 50 per cent, besides impaired vitality of the remaining. This point I have dwelt longer on than I really expected to. But it is the point or pivot on which success or failure may turn. Rather than neglect the firming process in any particular, I would sooner advocate putting the cuttings in loose sand, simply pushing them in and watering heavily.

After the cuttings are struck pot into suitable sized pots, and pot firmly, in fact hard. A plant potted loosely will only form a net of roots around the outside of the ball, whilst one potted hard will utilize the centre of the ball by its roots or in other words use the whole of the soil instead of half. Shade for two or three days, and syringe lightly three or four times daily, afterwards remove shade and expose to full sunshine, still continuing the syringing three, four or five times daily according to sunshine.

It will perhaps be better to speak of soils now. The best soil or compost that I know of for roses is fibry sod from a pasture and of a medium heavy texture, that is a soil neither light nor yet the extreme of heaviness. Sod taken from a very old pasture, or a piece of land that has been laying idle for a number of years without being grazed or mown, is very liable on being rotted down to be really too light for roses, and after being in the beds for a few months will somewhat resemble leaf mould. Experience in that line has caused me to fight somewhat shy of sod taken from idle pieces of land that has not been grazed or mown for years. The accumulation of vegetable matter in the way of grasses, mosses, leaves and other herbage gives it that leaf mold appearance when thoroughly rotted down and it is too light. Having procured a suitable sod and a supply of pure cow manure it is best to stack or pile it to rot. If wanted to use in April or May, or June it ought to be stacked in August to have it sufficiently rotted. It is a hard matter to lay down any rules for the proportions of manure to use to the quantity of sod, for the reason that the nature of the soil itself varies in so short a distance. The guide that I follow is simply this: Knowing where it is procured I take into consideration the nature of the grass crops or pasturage raised from it. For instance if from hay-land, which has yielded a fairly good crop, of course it stands to reason that such sod will not require such quantities of manure as sod taken from a piece of impoverished land. Thus while in some instances it is only necessary to use say one fourth, in others it is absolutely necessary to use one-half manure. It should always be borne in mind that roses require a good rich soil. I don't know of any instance where the gardener has to use common sense and judgment more than in the selection of soil for rose growing.

Having taken the propagation and soil into consideration we will presume that the young plants are ready to plant out

either in shallow benches or solid beds. In the bench system, which is most generally used, the house is fitted with benches raised from the ground and about four inches deep, adapted usually to the superstructure. After the plants of the previous year have been taken out and benches washed down, treat the bottoms and sides to a coating of lime wash which is made by slacking two or three good sized lumps of fresh lime in a pail. This is not only a good sweetener but a splendid preservative to the wood and safe to use. After drying, the benches are in fit condition to receive the soil. My practice is to cart the soil and throw it loosely into the benches, and level it off so that the benches are right full; the plants now being ready, are placed in the benches and the soil firmed in around the plants with the hands. They are then left a day or so, and then watered around the roots in a circle of about eight inches in diameter. This I think more advisable than watering the whole mass.

It is now that rose growing commences in earnest. There are several points that it is advisable to take into consideration. In the first place, young roses planted out in a glass structure of the modern type during the hot months of June, July and August without shade, are entirely out of their element, the rose delighting in a warm, mild, moist temperature. To assist the plants and counteract the hot arid atmosphere, I use the hose freely generally five or six times daily. The first hoseing in the morning is given with the idea of removing insects, dirt and any other foreign substance, and given under the foliage with force; the other syringings are overhead, with the idea of moistening the foliage on the upper surface, with plenty of water thrown about the walks, under stages, etc. to produce a moist genial atmosphere. The syringings are given during the day, no matter what time or how powerful the sun may be, in fact it is only during bright sunshine that the intermediate syringings are essential. The grower must consider what an immense evaporation is taking place through the foliage when subjected to the direct rays of the sun, which in some cases is more than the absorption through the roots. To put it in other words, the foliage gives off more moisture than the roots take up to sustain the strength of the plant at the same time, and that is why we often see the young shoots drop badly during a hot sun. This intermediate hoseing or syringing forms what I call an artificial evaporation and thus while that moisture put on by the hose is being evaporated it is not exhausting the strength of the plants, but allows the absorption by the roots to be utilized by the plants in strengthening and building them up, and helping them to develop good strong growth and foliage which is disease resisting, and not so liable to suffer from any chill or check.

Take a house of roses treated thus and followed up persistently, and it will be found that that dread disease, mildew, is fairly checkmated. It is the acknowledged fact that mildew is caused by a sudden chill or check, nearly always by a cold draught. To overcome it sulphur is resorted to, generally commencing about that period during the latter part of the summer when it is chilly nights, but not sufficiently so to begin firing. To illustrate the superiority of constant syringing, or of plants that have been built up by syringing, take a house of roses as generally treated. From the time they are planted until blooming time they are treated to one syringing or perhaps two a day, morning and afternoon. After the first syringing in the morning they are left to the drying influence of the sun for the remainder of the day. In the afternoon they present to the eye a drooping, flaccid, wilting condition, as though the very life had been sweated out of them. The foliage is small, slow of development, and the plants as a rule have a hard dry look about them, and what fit subjects for mildew they are whilst in that sweated condition. Sweat a rose well by evaporation through exposure to the sun without assistance, then expose to a chill and you have mildew of the strongest type. By attention to syringing you get plants that are strong and robust, with foliage quickly and well developed, presenting a leathery appearance, and not easily chilled or so susceptible to a check, and are to a certain extent insured against mildew. Roses treated as I have described will in most cases throw the first crop of bloom in three months from time of planting, provided the buds produced are constantly picked off until three or four weeks before wanted in bloom. After that the crops generally take from five to six weeks.

While advocating the principle of syringing there is another disease to look for; that is black spot, which usually makes it appearance on the hybrid teas at the close of the summer months, say September. As the season advances towards the fall it will be found that so many syringings are not necessary. To keep clear of black spot or to assist its departure it is essential that the last syringing should take place about two or three o'clock p. m. so that the house can dry up before night, throwing no more water about the house than is absolutely necessary, for a chilly damp atmosphere at night will facilitate black spot alarmingly. However, it usually with me leaves the plants when the house is well warmed up with fire heat.

Regarding the after treatment of roses, I never use any mulch. If it is used, especially if cow manure is used, it ought to be fermented or partially rotted. If very fresh manure is used in a green state as a mulch, it will in great many cases produce fungoid growth by the millions. These growths are a round form, semi-transparent and not more than an eighth of an inch in height, surmounted at the apex with a small black spot, which in turn leaves the round body and fastens itself on leaves and bloom to such an extent that the bloom will be disfigured and the plants drop their foliage. Better in my opinion to use liquid manure, and change it, alternately using cow manure, sheep, manure, guano, chicken manure, and lime water, for the latter using about a peck of lime to forty or fifty gallons of water. I have also used pulverized sheep manure to great advantage, when the plants are a little slow or backward, by sprinkling the beds with the manure before watering and then watering it in.

The best temperature for a house of roses where several varieties are grown together I have found to be about 56° to 58° night, a great deal depending on outside temperature. Thus if the thermometer should be 15° below zero outside I consider 50° to 54° enough inside, when I have an idea there is actually as much artificial heat in the house as when it is warmer outside. As to day temperature, if with sun, when the thermometer reaches about 70° to 75° I begin to ventilate, increasing according to temperature, decreasing gradually until closed. If with fire heat alone 60° to 65° is enough.

Height of Cannas.

I planted a lot of cannas last spring and hunted in vain for the height of the different varieties, so concluded to measure them for myself and give your readers who are situated the same way the benefit of it.

Antonin Crozy	4½ feet.
Admiral Courbet	3½ "
Acis	5½ "
Bertal	5 "
Boucharlat Aine	4½ "
Cardinalis	3 "
Chevalier Besson	4 "
Discolor violacea	8 "
Duchesse de Montenard	4½ "
Emile Leclerc	5 "
Ehemanni	6 "
Eugene	5½ "
Edouard Andre	4 "
Flamboyant	4 "
G. Constan	5½ "
G. Cousancat	6 "
Hippolyte Flandrin	4 "
J. Cardioux	6 "
Jules Chretien	4 "
La Moncot	5 "
Mirabeau	5 "
Mme. Crozy	4 "
Mme. Just	4 "
M. Laforcade	3 "
M. Liabaud	3 "
Premices de Nice	6 "
Revol-Massot	6 "
Star of '91	3 "
Ulrich Brunner	3 "
Victor Hugo	4½ "

Bethlehem, Pa. JACOB FRIES.

[The above list will undoubtedly prove useful, but it should be borne in mind that the height of these cannas varies in different localities, and under varying conditions. While with Mr. Fries Admiral Courbet is only 3½ feet tall we know that in other localities it has attained a height of from 5 to 6 feet. Such variations are undoubtedly due to soil and situation. ED.]

Views in the Greenhouses of F. L. Ames, Esq., at North Easton, Mass.

A visit to Mr. Ames' greenhouses at North Easton is at all times interesting. They are open to visitors from sunrise to sunset, and when the weather is favorable the extensive greenhouses are thronged with people. It is one of the places of attraction to visitors from surrounding towns for miles. Mr. Ames' generosity in allowing the public free access to his greenhouses is thoroughly appreciated and has had an educating and refining influence. Considering the very rich collection of plants brought together and the many thousands of visitors, no one act of vandalism is reported. True, occasionally a visitor may take a few flowers, but this is of such rare occurrence that it is not remarked.

The orchids are at all seasons attractive. The past years have added such a wealth of species, as well as varieties, that an orchid house has continuous attractions throughout every month in the year, not mentioning now the numerous hybrids and bi-generic hybrids among the lælias and cattleyas, which make up a large showing in Mr. Ames' collection and without any doubt comprise the finest orchids grown. No collection of orchids amounts to anything now unless you can show a good sprinkling of hybrids, exclusive of the vast numbers of cypripediums, which are now becoming so numerous that there is no man in the profession to-day who dare claim to know one-half with any degree of accuracy. While there are some grand new introductions, there so many indifferent

A GROUP OF TROPICAL FOLIAGE PLANTS AT MR. F. L. AMES'.

ones that "a little learning is a dangerous thing."

Masdevallias, odontoglossums and many oncidiums are a fine class of orchids, and all are at home together, one house, one treatment. Then the combination of color ranging in masdevallias from scarlet through purple and pink to white; oncidiums embracing every conceivable shade of yellow, and the odontoglossum crispums, with their grand arching spikes of flowers, some massive and pure white, others shaded pink, some rose, others delicately spotted, while some are heavily blotched with red and brown. Also the Odont. Pescatorei, with their smaller flowers, but much larger and more graceful flower spikes of white, pink and purple spotted flowers; the Odont. triumphans, orange and brown, O. Andersonianum, many forms, O. elegans, O. excellens, O. odoratum, O. mulus, O. nevadense, O. nævium majus, O. cirrhosum and O. polyxanthus. These are only a few of the many forms of odontoglossum which from February to July are continuously flowering and make up a variety of coloring which must be seen to be thoroughly understood. I, for my part, cannot understand why more people do not commence to grow this class of orchids. They are easily grown, they will last weeks, aye, some of them months, in good condition. I have had the pleasure of conducting many ladies through Mr. Ames' greenhouses at different seasons, and the expressions of pleasure which escaped them at the sight of a few spikes of odontoglossums when they have indifferently passed a whole bench of cypripediums, including some of the choicest kinds, is sufficient evidence of their value.

Mr. Ames' establishment comprises, besides his orchid houses, a large stove 65x30 feet, which is devoted to alocasias, anthuriums, crotons, pitchers, ferns, marantas, etc.; a central palm house, a large fernery, 40x45 feet, two miscellaneous houses and a north house which is devoted to plants principally in flower, the roof being covered with Lapageria rosea and alba.

In the palm house the principal specimens are an Anthurium Veitchii, which is central in the photograph here represented and which I think will go to Chicago in the Mass. exhibit. It is one of the finest plants known, being about fifteen feet in diameter. Phœnicophorium sechellarum, the thief palm, which will probably go to the World's Fair, and other fine plants are represented in many specimens.

Mr. Ames has recently added a long range of fruit houses, growing grapes, nectarines, plums, figs, etc., also a cucumber and tomato house. W. ROBINSON.

WHEN writing our advertisers please use one of your printed business letter heads or enclose your business card.

Miscellaneous Seasonable Hints.

About this time your customers will be walking in with their hanging baskets to be refilled, and you must fill some new ones for this spring's sales. They are a bother and a good deal of labor, and are not quite in demand equal to ten years ago. But many thousands are yet sold, and the man who retails at his greenhouse must have them. There are several styles of hanging baskets used in different parts of the country. I notice in Toronto that an earthenware basket is the thing, and in some of our large eastern cities a rustic wooden basket is in favor. We use what I believe to be the best basket, both for appearance and the well being of the plants. They are made of wire and lined with green moss. There are many different styles and shapes, with or without rims. Anyone who has emptied out an old hanging basket in the fall will have noticed that the plants did a lot of feeding with their roots on the moss, which could not have been the case if the basket was clay or wood. I do not recommend the use of hanging baskets for all places; hanging from the verandas of costly and modern mansions they are out of place, but there are many places where they are entirely appropriate. Summer residences in the country, or old-fashioned places surrounded with trees and ample lawn, and also at the more modest residence, they are quite in keeping. But this is not of particular

consequence because you will sell to all who want them. Ten-inch and twelve-inch baskets are the most useful size, and always try to sell the twelve-inch, as the larger the size the more satisfactory they will be. A most important point is that the soil used in the basket should be of the richest material, and in addition to plenty of rotten manure a little bone dust is desirable; it will tell towards the end of summer. Nothing less than a daily soaking will keep the plants in good condition, hence the great need of the soil being rich.

If you dissect a hanging basket and put a fair value on each plant used in it, about one dozen, you will jump at the conclusion that there is little money in it; but you must remember that most of the plants used can be grown in places which would not be otherwise used at all. For instance, vincas, lobelias, German ivy, glechoma and several other drooping plants can be grown to perfection on the edge of rose or carnation benches, and in the months of March, April and May do not do the slightest injury to the plants growing on the benches.

The plants should be firmly set in the basket, and the surface covered with green moss, particularly near the edges; this keeps the soil from washing off and prevents too great evaporation. In a 12-inch basket you can start in the centre with a good, thrifty growing geranium from a 3-inch pot. Such varieties as Emile de Gerardin (pink), F. S. Raspail (scarlet), or Ernest Lauth (crimson), are all good for the purpose. Around the center plant place three others selected from the following: Coleus of any bright variety, achyranthus of any variety, Centaurea candidissima or gymnocarpa, Geranium Mt. of Snow, Fuchsia recumbens, double petunia of upright growth. The drooping plants, so called "vines," are by far the most important part of the basket, and can be chosen from the following list: German ivy (senecio), vinca—variegated and green, tropæolum, lobelia, money vine, variegated glechoma, variegated abulilon, petunias of a good single strain, lophospermum, Othonna crassifolia, saxifrage. There may be several other plants as good as the above which you have found locally to be good for the purpose; if so use them.

Occasionally people tire of baskets with a variety of plants in them, and ask to have them filled, each basket with one kind of plant only. To suit this taste I have filled baskets with the following, which have been satisfactory: Begonia scandens, Begonia rex (if shady), tropæolum of the half dwarf varieties, Solanum jasminoides and several other plants. I have mentioned only the cheapest and toughest plants, and those that are easily raised. If you get an extra price from a good customer, instead of the common plant in the centre you can use a small latania, Dracæna terminalis or any compact growing palm. If started in good time a basket of the beautiful fern Nephrolepis tuberosa or exaltata is most desirable. Don't start the baskets too soon! Two weeks in the greenhouse is sufficient; if more they will make a big growth and suffer when they go outside.

Next week I shall have something to say about veranda boxes, which are a far more desirable embellishment to a house, large or small, than hanging baskets.

A correspondent asks "how to grow smilax in connection with a general florist business?" Nothing less than a twenty foot house would be high enough to grow smilax profitably, and the side benches can be used for general stock, while six or seven feet of the centre is just the place for smilax. Plant in ten inches of strong, well enriched loam. It is too late to sow the seed for this year. Buy the young plants and plant them in the bed as early as possible in July. Make the rows one foot apart, and the plants six to eight inches in the row.

Buffalo, May 1, '93. WM. SCOTT.

Seasonable Hints.

If your carnations have been "run cool" through the winter you are having an abundance of bloom at this time, and the cut should be properly taken care of. No matter if there is a glut, your flowers will sell if handled properly. There never would be a glut if the blooms were all properly sorted and marketed in the best of style. We have before alluded to this subject, but it is such an important one that we recur to it. The flowers should be sorted into two grades. Let those of the best quality be long stemmed (not less than eight inches), well formed, medium to large flowers. Put these up in neat bunches of twenty-five, stems of equal length in each bunch as near as possible, and each color to itself. Place your tag with name of variety and your own name and address thereon. Let the balance go as culls. Bunch these also in twenty-fives, and you need not be so particular with them. It is needless to say that you do not want your name on these. But you do want to give them a semi-decent appearance by not adding to them the refuse that should be thrown away. If you have some extra long stems with very fine flowers it will pay to bunch them separately—they will make an extra grade, and the *good* shorts, if you are cutting any, will make another grade, but our advice is to cut with long stems nearly always. In our own case we sort the flowers into about two-thirds good and one-third culls, with so few short stems as not to be worth mentioning. Now this grading can be varied to suit the market, provided close communication can be had between grower and purchaser. We would not advise lowering the grade in times of scarcity, but when flowers are plentiful and the "glut is on," the grade can be raised to suit the market, and the culls will be the only ones to suffer. The latter at such times could be thrown away to advantage, but we truly believe not a good flower would be lost. Besides, you are building up a reputation which is worth a great deal in these days of keen competition. This matter is of great importance to the trade; of far greater importance than the rust, spot or spider question. As Mr. A. M. Herr has remarked, there has been no scarcity of flowers occasioned by these diseases. But it is true that in all the abundance and so called over-production of the spring months and at other times, really good flowers are scarce. The good are marked with the bad, with the expectation that the one will sell the other. It is all a mistake. The result is that all—good and bad—at such times go to the dump. It is one thing to grow flowers and another thing to handle them properly. W. R. SHELMIRE.

Avondale, Pa.

Number of Blooms Cut.

Mr. N. Singler, Washington Heights, Ill., a large grower of carnations for the Chicago market, keeps an accurate record of blooms cut from each variety he grows and has on request favored us with the following copy of his record covering the season beginning Sept. 1, 1891, and ending Aug. 1, 1892:

Variety.	No of Plants.	Flowers Cut.	Average Per Plant.
Silver Spray,	2600	73,020 long.	28.85
		15,629 short.	6.
	Total,	88,649	34.85
Tidal Wave,	1800	68,027 long.	37.78
		31,508 short.	18.
	Total,	99,535	55.78
Lizzie McGown,	200	6,726 long.	33.63
		1,245 short.	6.22
	Total,	7,971	39.85
Chas. Sumner,	830	14,849 long.	18.56
		1,365 short.	1.70
	Total,	16,214	20.26
Garfield,	900	17,949	19.94
		2,595	2.88
	Total,	20,544	22.82
Snowden,	800	48,377	60.47
Grace Wilder,	450	6,506	14.44
Mrs. Fisher,	200	2,797	13.98

Carnation Nomenclature.

The nomenclature committee of the American Carnation Society respectfully request that every one who has issued a catalogue or list of carnations for '92 and '93 to please mail us one. Our object is to get the names of every carnation that has been handled by the trade the past season. Address,

ALBERT M. HERR,
L. B. 496, Lancaster, Pa.

Modern Methods in Growing Tropical Plants.

BY W. H. TAPLIN.

[*Read before the Florists' Club of Philadelphia, May 2.*]

It is with some misgivings that I have attempted to give information on modern methods as applied to plant growing before so progressive an organization as the Philadelphia Florists' Club, from the fact that much of the matter contained in such a paper must necessarily be familiar to many of those present.

But while admitting this fact, it is also well to remember that there are some slight differences of opinion as to the means to adopt in order to attain a certain end, both among plant growers as well as cut flower experts, and therefore the opinions to be presented in the present instance, though not claimed to be authoritative, may serve a useful purpose by provoking an interchange of ideas among the members, such interchange being invariably mutually beneficial.

One of the most notable things about modern plant growing is the increase of systematic work, or in other words more system in the handling and management of the stock. We no longer group together on one bench some Pandanus Veitchii and a few crotons, some kentias, and rhapis, arecas, marantas and ficus, the reason being that the plant buyer of the present day is far too critical to allow such practice as this to become profitable to the grower, sturdy, well-furnished plants with perfect foliage being demanded, and none other giving entire satisfaction.

A CORNER OF THE SHOW HOUSE AT MR. F. L. AMES'.

This demand naturally leads to the growing of specialties, and we therefore find the leading men in the trade applying themselves to certain lines, and devoting whole houses to a single species, thus being enabled to give that particular species just the conditions that are required for its superior development.

The necessity for such treatment becomes more apparent when we take into consideration that Areca lutescens flourishes in a night temperature of 70° while the kentias make a much more satisfactory growth in a house in which the temperature averages about 60°, the foliage of the latter being much stronger under such conditions, and also less liable to become infested with scale and other insects.

This growing of specialties doubtless tends to lead the public into certain ruts in regard to the plants that they buy, though at the same time it may be said that the specialists know better than the general public what plants are best suited for house decoration, and that as the number of specialists increases the variety in stock will also increase. But be this as it may the fact remains that the growing of specialties does lead to a better knowledge of certain plants, and consequently to a superior quality in the output.

Another point to be noted in the systematic methods of the present day is that cleanliness becomes more valued, both in the stock and the surroundings, for while we have all been long familiar with the old adage that "cleanliness is next to godliness," yet the truth of this proverb frequently slips from our memories while engaged in our daily duties around the houses, and we do not always stop to think that (other conditions being equal) a customer prefers to inspect and purchase stock in a neat and tidy establishment, and therefore it pays to keep pots, plants, and houses as clean as possible. And in order to turn out strong and thrifty plants enough room or breathing space must be given to each specimen, bearing in mind that any plant or lot of plants that is not worth growing well is not worth growing at all.

A succession of crops must also be provided in order to keep the houses fully occupied, and this is secured by the continual propagation of young stock, that when one lot is sold another may at once be potted on.

Of course we cannot always guage the market correctly, and even experienced growers will sometimes overload, but when such a thing does occur, the surplus should be disposed of on the rubbish heap before it interferes with the following crop, unless it consists of plants that will increase in value by the following season.

The potting on of young stock to which reference has already been made, is one of the important operations to the grower, for a plant that has become stunted for want of a shift, is likely to lose much valuable time after potting before it is ready to resume active growth. But over-potting must also be avoided, for such practice not only exposes the plant to some dangers from over-watering and its attendant evils, but also makes it almost impossible for the retail dealer to fit the plant into a fancy pot without making it look ridiculous.

The soil for potting is naturally an item of some importance, and the chief constituent should be good fibrous loam, such as would be likely to prove satisfactory for rose growing, and to this may be added various fertilizers as may be most convenient, among which short well-rotted stable manure takes first place, while bone dust, soot, guano and various prepared fertilizers may be used in reasonable quantities and with good results, bearing in mind the general rule that strong rooting species can assimilate more manure than their weaker relatives, and that therefore a latania or areca will luxuriate in a much richer compost than is adapted for Cocos Weddeliana. Some peat is also useful, especially when the loam is of a clayey nature, and tends to give quicker results in growth.

The rushing of stock by means of strong heat is a practice that cannot be too strongly condemned, and I think is less frequently indulged in now than a few years past, but still this mistake is sometimes made yet, and while some plants grown by that method are very handsome at the

time of sale, yet they do not wear well, and generally prove a most prolific source of complaints to the dealer.

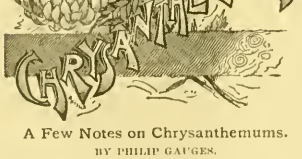
A more reasonable method of securing size in a short time among palms in particular is that so commonly practiced now of bunching several small plants together in one pot, thus securing a bushy and salable plant in a much shorter period than is required for a single plant to attain the same size.

This method may be adapted to several species with good results, and especially with Areca lutescens, but though it has also been applied to kentias and latanias, yet the effect in regard to the last two species noted has not been altogether pleasing in my estimation, the crowding of two or more of either kentias or latanias seeming to destroy the individuality of the species.

But whatever be the species that is grown in this manner, it is advisable to begin the operation while the plants are quite small, the best results being secured when the seedlings are bunched together at the time of the first potting.

Another innovation that has been tested during a few years past is that of farming out palms and other decorative plants in the West Indies, from whence they are brought north when a sufficient size has been secured, to be potted up and used for decorating. Such stock is however, more or less imperfect, and while doubtless having some value for massing in a decoration, has not as yet proved a signal success.

Now to summarize briefly what has been so imperfectly outlined in these remarks, modern methods of plant growing include the production of vigorous specimens in great quantities by the use of improved appliances and the skill and experience of specialists, by means of which the most favorable conditions for the promotion of healthy growth are secured. And while these methods have already secured such results as would have been thought almost incredible only about twenty years ago, yet it does not seem too much to predict that the next decade will see even greater changes and improvements, and that the end of that period will find a much more systematic condition of our business, and under which we shall be able to accumulate knowledge and experience, and possibly shekels, much more rapidly than at present.



A Few Notes on Chrysanthemums.

BY PHILIP GAUGES.

[*Read before the Washington Florists' Club, April 20.*]

One of the most important things in growing chrysanthemums (or anything else) successfully is the preparation of the soil. There is not much differance in the soil for roses and chrysanthemums, only for the latter it should a be little older—that is, the sod more thoroughly rotted.

To prepare the soil cut the best sod that can be had in the fall and stack the sod grass-side downward. Some prefer to put a layer of sod, then a layer of cow manure, with a good sprinkling of bone-meal—say about a peck to a cart load of sod—but I do not think it is necessary as the manure can be added when used. Let the stack taper to a point, to let the rain run off. By spring it will be in good condition to be cut down as wanted. For pot culture a little sand and leaf-mould may be added, also a little crushed charcoal. If the manure has been omitted when stacking the sod, use about one-fourth half-rotted cow manure and a five inch pot full of bone-meal to the barrow full of soil. The manure should not be too much rotted; it can be used almost fresh for the chrysanthemum without any bad effect. Slacked lime or lime rubbish should be added.

The stock plants should be kept in a cool house or close frame, with plenty of air when the weather permits, so as not to get them drawn. The time of rooting the cuttings depends on the purpose they are intended for. For specimen pot plants they should be rooted by February 15 and not later than March 10; it depends on the condition of the wood. Select only the strongest shoots when about two or three inches high. Do not let them stay in the sand too long. You will find it best to pot them in two inch pots when they are beginning to show signs of roots, using one-half sod and one-half sand, and a little powdered charcoal.

Be careful not to overpot them. If you do the soil is apt to turn sour, and when it does, you may stop right there, for the plant will never make a healthy specimen. Extra strong growing varieties do not mind a large shift as soon as the ball is well filled with roots. To be on the safe side use plenty of drainage when repotting from three-inch pots. "For drainage use clean pot-sherds or broken oyster shells with some charcoal about the size of a chestnut." The time for potting must be left to the judgment of the grower. When they have well started in the three-inch pots give them the first pinching as they need it. Take out only the very tip, so as not to check them too much.

Have plenty of plants and after selecting the best for specimens the others can be grown on to take cuttings from later. The pots should be plunged at least half their depth in ashes to keep the roots cool. The beds can be raised a little to give the water a chance to run off when a wet spell sets in.

The following are all good growers and with proper attention will make fine specimens:

VARIETIES FOR SPECIMENS IN POTS.

WHITE: Jessica, Miss Minnie Wanamaker, L. Canning, Ivory, Joseph H. White, Mrs. E. D. Adams, Mrs. W. J. Kimball, Mrs. Senator Hearst, Beacon, Miss M. Colgate, Mrs. J. Hood Wright, Miss Annie Manda, Miss Mary King, Mrs. Jerome Jones, Yonitza.

PINK: Viviand-Morel, Violet Rose, Mrs. Irving Clarke, Louis Boehmer, Lillian B. Bird, Ada Spaulding, Lillian Russell, Exquisite, Roslyn, Col. H. M. Boies, Etoile de Lyon, Mrs. John Westcott, Mrs. D. D. L. Parson, Waban.

YELLOW: Wm. H. Lincoln, Mrs. Hicks Arnold, Mrs. Maria Simpson, Mrs. L. C. Madeira, Harry May, Dr. H. A. Mandeville, Golden Gate, Col. W. B. Smith, Eva Hoyt, Volcanic, Harry E. Widener, H. Yoshiike, Roballion, W. A. Manda.

RED AND MIXED COLORS: Mrs. C. H. Wheeler, Mrs. A. J. Drexel, E. G. Hill, Mr. A. G. Ramsay, Elmer D. Smith, Edward Hatch, G. W. Childs, H. T. Spaulding, Marguerite Jeffords.

The wonderful improvements in the last few years necessitate a rigid weeding out of many heretofore considered good varieties. In order to be a successful prize taker at the shows one has to keep his eyes open and watch the new comers and procure at least some of the best. It is not always the high priced ones that are the best, as it depends very much on the rarity of the variety that holds up the price. If it is a good grower the raiser or disseminator can get up a fine stock in two years (no seedling or sport should be sent out under a two years trial) and sell it at a fair price. The best way to do is to attend all the shows you can, make notes of the best novelties and compare them with the older ones you have, and if the comparison is in favor of the new ones *get them*. A good plan is to get quite a number from different localities and give them a fair trial (some varieties do well in one state and very poorly in another). Out of eighteen varieties you should get at least twelve good ones.

Feeding is another important item and should not be overlooked, for when the plants have been potted for the last time and have filled the pots with roots it is the only thing you can do to keep them moving. Begin with a weak dilution of liquid manure about twice a week and as the plants advance give it a little stronger every time you use it. "But that depends on the strength of the plants, which must be in perfect health or else the feeding will do more harm then good." As the chrysanthemum is a great feeder it also likes a change in its food. Say manure water one week, bone-meal or guano water the next. If cow manure is used in preparing the liquid the first week change it the next to horse, sheep or hen manure (be careful with the latter two and do not use too much as they are very strong). Soot is also very good. It gives the foliage a good color and keeps the worms out of the soil. To prepare liquid manure, if convenient sink a vat or large tub in the stable yard near the manure heap to catch the drainings thereof. This will be very strong and should be diluted to suit the condition of the plant. Or take a large barrel or cask, put in a wheelbarrow full of cow manure, an eight-inch pot full of soot, and fill with water. Let it stand for a day before using. The manure should be put in guano or other coarse bags to keep the water clear and prevent it from stopping up the spout of the watering pot.

For growing on benches one flower to the stem, cuttings rooted from May to the first of July give the best results. When they have taken to the soil in three inch pots, plant them on the benches; six or eight inches apart each way is plenty of room for single stems, but if you intend to run three or four shoots to the plant a foot will be better. Early planting is not advisable. If planted before June they are apt to run up lanky and you will have poor flowers, as most of their strength will be spent before they form their flower buds. The benches should be at least eight inches deep and well drained. Oyster shells and coarse cinders make a very good drainage, combined with some fibrous parts of the sod. If the sod was stacked without manure in the fall add about one-fourth cow manure and about a five-inch pot full of bone-meal to a barrowful of soil, mix it well and fill the benches about six inches; that will allow for top-dressing later in the season.

Staking and tying is very important. The reed stakes are generally used, but the method now used by many rose growers is very good; it is more neat and will

not give way as the reeds are apt to do when the plants are from four to seven feet high. This plan is to stretch a stout wire the whole length of the bench for every row of plants, about six inches above the soil, and one along the rafters to correspond. Then run a thinner wire perpendicularly from the upper to the lower one for each plant.

Watch the plants carefully, remove all the side shoots and suckers to avoid crowding, and give all the light and air possible. Tie up as the plants advance and do not wait until they get top-heavy and apt to be broken off when syringing.

Close attention must be given when they form the flower buds. In disbudding use great care. Select only the best, rub off with the thumb all the buds not wanted as soon as you can handle them. I think it best to leave a few more than wanted until they are about the size of a pea, then reduce to the required number. It is impossible to lay down a rule as to which are the best buds. That must be left to the grower.

After the cuttings are well rooted give plenty of air and if possible room to keep them from getting drawn. Some of the best flowers I saw last fall were grown in an old house with plenty of glass missing. Avoid humid and close atmosphere at all times day or night, if it does not interfere with other plants in the house.

The black aphides or black fly and thrip can be kept off by using tobacco water or tobacco-dust. Quassia chips (bitter-wood) is also very good. The lady bird beetle and its larva should be encouraged at all times. As soon as they come about plentiful you will have little trouble with black fly.

The following are all good for single flower or one flower to the stem:

WHITE: Miss Minnie Wanamaker, Joseph H. White, Mrs. E. D. Adams, Mrs. W. J. Kimball, George Savage, Mrs. Jerome Jones, Miss Annie Manda, Jessica, Yonitza, Mrs. George Bullock, Ada McVicker, Mrs. Robt. Craig.

PINK: Viviand-Morel, Louis Bœhmer, Exquisite, Etoile de Lyon, V. H. Hallock, Mrs. D. D. L. Farson, Harry Balsley, Mrs. Irving Clark, Lillian B. Bird.

YELLOW: Wm. H. Lincoln, Mrs. Hicks Arnold, Harry May, Mrs. Maria Simpson, Mrs. L. C. Madeira, Golden Gate, Dr. H. A. Mandeville, Harry E. Widener, Eva Hoyt, Col. W. B. Smith, Emma Hitzeroth, H. Yoshiike.

RED AND MIXED COLORS: Elmer D. Smith, G. W. Childs, Edward Hatch, H. T. Spaulding, Marguerite Jeffords, Mr. A. G. Ramsay, Cullingfordii.

SOME GOOD VARIETIES FOR SPRAYS: John Thorpe, Gloriosum, L'Angelus, Josephine Schlicht, Julius Scharff, Emily Dorner, Garden Queen, Frances Tarbox, Golden Plume, W. A. Manda, E. D. Smith, Marvel, Nymphæa, Mrs. J. Hood Wright, Pigeon, Pawnee, Egret, Sunray.

The following is the best for six-inch pots, single stem with one flower—Root cuttings about July 1, and shade the plants during the heat of the day until well started: Louis Bœhmer, Golden Gate, Mrs. Jerome Jones, G. W. Childs, H. T. Spaulding, Etoile de Lyon, Harry E. Widener, Mrs. Robt. Craig, Edward Hatch, Col. W. B. Smith, Emma Hitzeroth, Harry Balsley, Marguerite Jeffords, Miss Annie Manda, Harry May, Ada McVicker, Viviand-Morel, Miss Minnie Wanamaker, H. Yoshiike.

I may also mention a few very fine varieties I saw in bloom last fall for the first time. I did not see them growing, but from the looks of the foliage they are good growers: Emily Ladenburg, deep crimson; A. T. Ewing, cream white, shaded carmine pink; Robt McInnes, scarlet and gold; Golden Wedding, richest golden yellow; Gettysburgh, crimson; Niveus, snow white, grand; Mrs. M. W. Redfield, peach pink style of Ivory almost as early; Mrs. F. L. Ames, yellow incurved; Summit, pale lemon like a dahlia; Miss Frances Thorley, pure white; Mr. W. C. VanHorn, deep buff shaded carmine, early, flowers large and very double; Mabel Simpson, incurved chinese, snow white, style of Mrs. L. C. Madeira; Mrs. Bayard Cutting, deep rose; Mrs. Leslie Ward, buff, shaded pink, tips of petals pale yellow; Mrs. Henry Graves, beautiful peach pink; Mrs. W. P. Henszey, very dark crimson, reverse of petals old gold.

World's Fair Impressions.

BY A CANADIAN.

People are working night and day in every building on the grounds now in order to be in decent shape on the opening day, and as far as I can see the Horticultural building will be forwarder and in better shape than any of them, and this in spite of it being the only one that has been open to visitors all the time and in spite also of other difficulties that "Uncle John" has had to contend with. These difficulties came to a focus last week in consequence of which Uncle John resigned his position, but it was not accepted, and he was made *Chief* of the Floricultural *Department*. So now his hands are free, and there is no doubt but that things will be managed right.

Messrs. Pitcher and Manda have got their lot of plants set up, and a fine lot they are too. If there was nothing else they would be worth coming to see. I have taken down many names of plants specially deserving of notice, and intend to refer to them from time to time. A specimen of Cibotium Schiedei at the south end of their exhibit in the curtain is, I think the most beautiful thing in the line of tree ferns I ever saw. Their clump of araucarias too easily takes one at least half an hour to pore over in order to take in all the beauties of the different varieties.

Mr. Dean and Mr. Donlan have been working like beavers at the New York exhibit, and I think it will be a pleasant surprise to the boys when they see it, and will be very "fetching" with the general public. The addition of a splendid lot of plants received on Saturday labelled "Mr. Jay Gould" puts color and finish on; the crotons in this lot are magnificent for color and health; among the best are Harmonianum magnificum, President Chinean and Cooperi.

The Japanese garden is now about finished, and is a great attraction to visitors; the style is quite unique. The fancy leaved maples are extremely beautiful with their spring growth just now.

The Ontario (Canada) exhibit is standing the vicissitudes of the Chicago spring climate fairly, and will, with the addition of a car load of finishing off stuff, such as ferns, marantas, etc., (which ought to have arrived last week, but like many others failed to materalize), hold its own in good style.

California, if weight counts for anything, will have the biggest exhibit in the show. There must be a very large hole in the ground where all the soil was taken from; but the exhibit is not placed yet so it is too soon to criticise. E.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser in these columns.

New York.

By the time this reaches our readers the spring exhibition by the New York Florists' Club at Madison Square Garden will have about come to an end. It is to be hoped that the efforts of the hard working committee which has had the preparations in charge will meet with the great success which they well merit. They have labored at a great disadvantage. Through no fault of theirs, and in spite of their opposition, the time for the exhibition was finally set at a most unfortunate date, too late for the fine display of indoor grown spring plants which New York is always prepared to make in the proper season, and too early for the outdoor flowers. This being the opening week of the great World's Fair at Chicago will also serve to distract public interest and newspaper attention from the floral exhibition, but whatever may be the outcome financially, one thing is certain, that the club, and especially its committees will have nothing to be ashamed of in their part of the undertaking.

The cut flower market remains about as last reported. There are plenty of roses in all grades of quality, but few carnations. The rival plant markets at Canal street and Union Square are just in the height of the rush, and make an interesting scene for the early morning visitor. The beds in the parks and squares are brilliant with spring flowers.

Lawrence Hafner, 907 Broadway, has retired from business. He will be greatly missed from the ranks, especially from the merry crowd that is wont to assemble at Young Bros. every morning. Lawrence was never known to keep perfectly quiet for five consecutive minutes. Who will collect pennies for the hand organ man now?

Philadelphia.

Mr. Robert Craig shipped his exhibit of palms and other foliage plants to Chicago on Saturday last and will go out to arrange them the 2nd of May. His son William will spend the summer at the grounds taking charge of this and other collections.

There has been very little bedding out done in this neighborhood as yet, although the plant men report business to be brisk, and the prospects for a good spring business are very bright.

George Anderson has his second crop of hydrangeas in. They are very fine plants. The color, a thing so desirable in a hydrangea, is perfect, being a beautiful pink; the separate florets are large and broad and the heads of flowers very fine. They are the finest lot of plants we have seen this season. His last house of Brunners is in and he has been cutting some very fine flowers.

J. W. Colflesh has had a fine crop of Jacqs, but could scarcely meet the demand at good figures.

Roses are about the same price as last week and the demand for them about equals the supply. Valley has become plentiful, as a number of florists who had been keeping it back hoping it would become scarce are obliged to bring it in, as it will soon be in flower outside. The price ranges from 2 to 3. Carnations are plentiful and are holding their own very well, many varieties looking as well as at any time this season. The price is from 1 to 1.50 and 50 to 75 for shorts. Sweet peas are in good demand and sell readily at from $1 to $2 a hundred sprays.

Tulips and daffodils are nearly done;

3 to 4 has been the price the past week. Baker has been receiving a lot of lilac from the south which sold readily.

George Watson is away on a trip through the New England States.

John Walker returned from abroad on the steamer City of Paris April 29.

There should be a great boom in the American Belle the coming season. There was a grand parade in its honor in Philadelphia and it has had a continued ovation during its trip to Chicago, where it will spend the summer and be second to none as one of the leading attractions of the Exposition. Mr. Burton should see to it that his name is given more prominence in connection with this affair. K.

Boston.

Pleasant, spring-like weather has come to us at last, and all out door vegetation is leaping forward with an apparent determination to make up for lost time. Hyacinths are blooming and early tulips are beginning to show color. The out door work and the constant attention required by the bedding plants in the houses now, distract the growers' attention from their roses and carnations, and the result is apparent in the quality of some of the lots being sent in. There is any quantity of poor stuff about town, and it gets, as a rule, into the hands of the street fakirs without much difficulty, where on the street corners it has to take its chances with its more seasonable competitor, the popular mayflower, and the mayflower catches most of the customers.

The most remarkable thing about the present condition of the market is the scarcity of white carnations. Good white carnations could be sold at holiday prices could they be obtained, but they are not to be had, and so the "makers up" have to fall back on milk weed balls and other dried or imitation blooms to fill the gap. There are quantities of longiflorum lilies on the market, and these are a big help in the making up of funeral work in the absence of the white carnation. Bulbous stock in general still holds on. There is not an enormous quantity of it, but there is all the market can handle. Smilax is, as usual at this season, a very scarce article, and good stock could be readily disposed of at three times the winter price.

The plant auction rooms are feeling the influence of the spring activity, and on Wednesday and Saturday our two worthies, "Ned" Hatch and "Nick" McCarthy exercise their lungs and try issues with the same old wily crowd. The early flowering shrubs and bulbs are beginning to make the parks attractive once more. Out at the Arnold Arboretum an immense amount of road building and other heavy work has been accomplished since last fall, and extensive plantings of beds, borders and hillsides have already been done this spring. The general plan of this park has now so far progressed that one can get a good idea of what it is eventually to be. It will certainly be one of the most interesting and beautiful spots in this country.

Mr. J. Blaauw, of Boskoop, Holland, is in town. He being an exception to the rule in regard to Holland visitors, and having no bulbs to offer, is received with trustful confidence wherever he goes, as soon as this fact is ascertained.

The only George Watson, of Philadelphia, is also here. George is always welcome in Boston, no matter what his errand may be.

Mr. Alfred Dimmock is also within our gates, and brings as usual a book full of wonderful novelties in orchids wherewith to tempt the buyers.

Mr. J. H. Woodford has departed for Chicago, having in charge a large addition to the Massachusetts horticultural exhibit.

Mr. Louis Guerineau has also gone to Chicago to look after the exhibit of Mr. J. W. Manning.

Mr. Wm. Robertson has bought a place at Waverly, where he will erect a range of greenhouses.

Mr. C. M. Atkinson is rapidly recovering from his late illness.

Chicago.

At the last meeting of the Florist Club after several new members had been elected, the committee on contest in floral arrangement at the World's Fair, submitted the following schedule for the consideration of the Club.

SECTION 1.

ROSES IN HANDLE BASKET.

(Not exceeding 18 inches in diameter or length).

Class A.—Arrangement of roses one variety only with their own foliage, no other green being admissible. Without ribbon.

Class B.—Arrangement of roses in one color, with other green in addition to their own foliage. Ribbon to be used.

Class C.—Arrangement of roses in two colors, without other flowers. Foliage other than that of the rose admissible, but ribbon excluded.

Class D.—Arrangement of roses, both basket and material to be supplied contestants. The form and size of basket and quantity and quality of flowers supplied each competitor to be exactly the same. The material supplied need not all be used. No ribbon.

SECTION 2.

ROSES IN BASKET WITHOUT HANDLE.

(Limit of dimensions same as preceding. No ribbon admissible).

Class A.—Arrangement in one variety with own foliage only.

Class B.—Arrangement in two colors, with adiantum in addition to own foliage.

Class C.—Arrangement of one variety of roses, with addition of one other variety of flower.

Class D.—Same rule as for handle basket in Class D, Section 1.

SECTION 3.

VASES.

(Not exceeding 15 inches in height. To be arranged with view of using on pedestal in corner of reception room. Ribbon excluded from this class).

Class A.—Vase of roses, one sort only, with own foliage.

Class B.—Vase of roses, one sort only, arranged with ferns or other foliage in addition to that of the roses.

Class C.—Vase of flowers other than roses, any foliage admissible.

Class D.—Vase of flowers, vases and material to be supplied under rules for Class D, Section 1.

SECTION 4.

BUNCHES.

Class A.—Bridal bouquet.

Class B.—Hand bunch of colored roses.

Class C.—Hand bunch of flowers other than roses.

Class D.—Hand bunch of flowers, materials to be supplied as in Class D, Section 1.

Class E.—Natural arrangement for gift or souvenir showing decided novelty and artistic merit.

SECTION 5.

Class A.—Dinner table decoration, table set with 12 covers. Full discretion to contestant as to materials and style of decoration.

Class B.—Arrangement of flowers in a box to present the best effect when opened. Box not to exceed 16 inches in length or breadth, and boxes to be closed when presented for judging, so they may be opened by the judges, who shall also consider the external appearance of same.

It was at first proposed to have the contest in August just after the date for the meeting of the S. A. F. at St. Louis, but the opinion was so general that it would be quite impossible to secure proper material at that time that it was finally decided to change the time to the third week in October. The committee explained that the schedule submitted was—if it met with the views of the Club—to be then submitted to the other Florists' Clubs of the country for suggestions as to desirable changes in same, and that a schedule would not be definitely adopted without the concurrence of a majority of the Clubs. As the consideration of the schedule class by class promised to take up a good deal of time, and in the mean time the monthly supper was waiting, the chairman of the committee moved that consideration be deferred until the meeting to be held May 11, which was carried.

The grand march to the long table was headed by the club's band led by Walter Kreitling as drum major, whose masterly handling of the two pint bottles he utilized in the absence of a baton brought out rounds of applause. The band consists of the McKellar Bros., and two friends, and includes a banjo, harmonica and guitar, and as all are excellent singers this organization is a feature at the monthly suppers.

After the cigars had been passed, President Hauswirth proposed a toast to the Florists' Clubs of America, and called upon Mr. W. A. Manda, President of the New York Florists' Club, who responded with a speech in which food for thought and for merriment was admirably combined. He was followed by Mr. D. B. Long, president of the Buffalo Florists' Club, who spoke to the same toast.

A toast to the horticulturists of France was then proposed, and the sentiment was ably responded to by Messrs. Vilmorin and Lemoine, of Paris. Both spoke English with but little accent, and the many expressions of fraternal feeling were received with prolonged applause. Mr. Vilmorin is a member of the great seed firm of Vilmorin, Andrieux & Co., and Mr. Lemoine is connected with the official superintendence of the parks of Paris. Both are officially connected with the World's Fair Commission of the French Government.

In the absence of "Uncle John" Thorpe who was unable to be present, owing to matters of unusully pressing nature, Mr. H. Holzapfel responded for the World's Columbian Exposition, and especially for the Bureau of Floriculture, which he believed would soon be the *Department* of Floriculture. This statement was greeted with cheers.

Mr. Schiller, connected with the horticultural display of Germany at the Fair, responded for the horticulturists of the "Fatherland," after which the musical organization (known as the Glue Bros., as they stick together so well) favored the company with a selection and responded to an encore.

A toast to the horticultural press was responded to by Mr. G. L. Grant, of the AMERICAN FLORIST, after which Mr. Edgar Sanders sang an old English song, and short speeches were made by Messrs. Halle, Corbrey, Lawrence and others.

The "Glue Bros." kept up the music and at the request of the president, Messrs. Vilmorin and Lemoine led the company in singing "The Marseillaise." At the conclusion, with a "Vive La France," the company gave three rousing cheers in honor of their French guests. Then followed "America," "Annie Laurie" and "Auld Lang Syne," and a "gradual" adjournment.

The opinion seems to be general that the monthly suppers are a decided success.

At the meeting of the Executive Committee of the Horticultural Society Thursday afternoon it was decided to go ahead with the exhibition next November, and a preliminary schedule was prepared for immediate distribution. The prize list remains much the same as last year.

The opening of the Fair appears to

have had a very beneficial affect on the flower trade. Good flowers have not been at all plentiful during the past week, and all such in the market have been sold out promptly, while the poor stuff was soon disposed of to the fakirs. Taken all round, the demand has been excellent, and prices remained stable.

The scarcity of white carnations is noted here, as elsewhere, and it is rather difficult to find a convenient substitute for them. Good roses have not been over plentiful, though some nice Beauties and Brides have been noted. In bulb stuff, Valley and Romans were called for freely, and the stock was not over the demand, while the supply of Dutch hyacinths and tulips shows a great falling off. Though there are plenty of Harrisii in yet, they are not quite so plentiful as they were. These lilies have been distanced by fine longiflorum grown in cold houses or frames; they are of first class quality, and fine keepers.

The continued cold rain has affected the quality of lilac, and quantity too; it has been less plentiful for a few days. The same may be said of the trailing arbutus, or mayflower, which is shipped here from Wisconsin and Pennsylvania. The first local out-door narcissus came in this week from the old Kennicott place; it was of remarkably fine quality.

None of the heads of departments at the World's Fair had more reason for cheerfulness than Uncle John Thorpe; although his work was not entirely completed the Horticultural Building presented a far more finished appearance than any other department in the Fair, and the great show of superb plants made a striking exhibit. Few can conceive the herculean work required to make that great building blossom like the rose, and the greatest possible credit is due Mr. Thorpe and his staff as well as to the exhibitors. By comparison with the deserts in some other departments one can see how much the floricultural section has to be proud of. Mr. Thorpe was entrusted with the decoration of the President's apartments at the Lexington, which was very handsomely carried out.

Among visitors to the city are Messrs. Vilmorin and Lemoine, Paris, France; James Dean, Bay Ridge, N. Y.; W. A. Manda, Short Hills, N. J; H. Sunderbruch, Cincinnati; W. G. Huscroft, Steubenville, O.; Jas. I. Donlan, New York; Daniel B. Long, Buffalo; J. D. Carmody, Evansville, Ind.; M. A. Hunt, Terre Haute, Ind. Robert Craig, Philadelphia, is expected daily.

Thos. W. Weathered's Sons, New York, are building a handsome conservatory for M. A. Ryerson.

Thirty minutes in which to decorate an extensive suite of rooms is somewhat limited. That's the length of time P. J. Hauswith had in which to decorate the rooms of the Duke of Veragua at the Auditorium Hotel. Other arrangements had been made, but the decorations failed to materalize and Mr. Hauswith was called on to do the job in "15 minutes." By a lucky delay of the party at the depot he had 30 minutes to work in.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—By a young lady in a floral store. Have had some experience.
Address M A, American Florist.

SITUATION WANTED—By married man, age 27, grower of roses, carnations, violets and plants, not afraid of work; good wages wanted. Address
CARNATION, care American Florist.

SITUATION WANTED—By single, competent florist, posted in growing roses, carnations, palms, bedding plants, etc: 18 years experience.
C H, care American Florist, Chicago.

SITUATION WANTED—By young single man in or near Chicago. Have had six years experience and can give good reference as to character and ability. JACOB BANNINGA, Brookline Park, Ill.

SITUATION WANTED—By German-American, all round florist, single, age 35, 15 years experience, sober, industrious, either with private, commercial, cut flower or plant establishment; state wages.
A D M, 907 Grand River Ave., Detroit, Mich.

SITUATION WANTED—By a first class florist, German, single, age 26, who understands all about florist and landscape gardening, strictly sober, as foreman, on private place preferred. Best of references. W, care American Florist.

WANTED—Double Pink, Crimson, Rose, Yellow Oleanders. State price, 2 or 3-inch pots.
NANZ & NEUNER, Louisville, Ky.

WANTED—Two first class salesmen, good makers-up for retail store. Address
CHICAGO, care American Florist, Chicago.

WANTED—A first class designer and decorator, must be temperate and come well recommended. Address THE DENVER FLORIST CO., 235 16th street, Denver, Colo.

WANTED—Single man of energy and ability for roses and cut flower stock. Address with terms and experience J. T. WILLIAMSON, Prop. La Rose Gardens, Memphis, Tenn.

WANTED—A man for general greenhouse work who understands his business; wages $25 per month with board, or $45 without. Apply
THOS. T. HOUTON, 84 South St., Morristown, N. J.

TO RENT—6 houses in Chicago with 11,000 feet of glass, stocked with forcing stuff, roses, carnations violets, smilax, etc. Address
R P, care American Florist.

FOR SALE—Two boilers, 2,000 feet hot water 4-inch pipe, 4,000 feet of glass. Greenhouse to be removed. P. O. Box 610, Exeter, N. H.

FOR SALE CHEAP—Second hand No. 1 Exeter boiler, 18 sections, 25-horse power, as good as new; steam gauge, water gauge all complete. Price $300. This is half the price of new. Address
J. G. BURROW, Fishkill, N. Y.

FOR SALE—3 greenhouses and stores fronting on one of the best business streets of Chicago. All well stocked, horse and wagon, 8 year lease paid up to March, 1894, right near public park. Proprietor is unable to tend to it. Price $2,500; half cash, balance in good secured notes.
Address M. care American Florist.

SPLENDID OPPORTUNITY—To let on lease for eight or ten years, a large property for greenhouses in most desirable locality; extra good home market; church near by, street cars running past premises, and within twenty minutes' ride of public buildings. Address J. W. Moore, St. Vincents' Seminary, Germantown, Philadelphia, Pa.

A RARE CHANCE.

For sale, on account of ill-health, a flower store, established since 1884, doing a good business in the flourishing city of Hoboken. Apply to

A. & E. ASMUS, 515 Washington St. HOBOKEN, N. J.

FOR SALE.

The Oldest Seed and Florists' Store in New Orleans

on account of retiring from store business, a large selected stock and good patronage from the best class of customers in the city. Address

R. E. SIMONS, New Orleans, La.

FOR SALE OR LEASE.

Owing to poor health I offer for sale my florist establishment containing two acres of ground, dwelling house, barn and about 16,000 feet of glass heated by hot water. I will also lease to a reliable party. No better opportunity is offered for a man to establish himself in a paying business. For further information address

HANS NIELSON, St. Joseph, Mo.

For Sale at a Bargain.

An extensive green-house establishment, located fifty miles from Boston in a city of fifty thousand inhabitants. The estate consists of ten green-houses, each from fifty to one hundred and fifty feet long by twelve feet wide, all thoroughly heated by the Weathered Boiler, stocked with ten thousand bedding plants in best condition for spring sale, and also, roses and carnations and smilax planted in open bed; a dwelling house of six rooms, a barn and carriage house; and also $8,000 feet of land planted with apples, pears, grapes, raspberries, blackberries, and ornamental shrubs, and containing a trout and lily pond, with running stream.

This offers a rare chance for any one desiring to enter the business. Only ten minutes walk from the R. R. station. Electric cars pass the door. Large home trade. Apply to
WELCH BROS., 2 Beacon St., Boston.

FOR SALE OR TO RENT.

The following greenhouse property, situated on the outskirts of Springfield, the City of Houses; or will sell Greenhouses, Stock and Fixtures and give ten years' lease of 2 acres land. Ten houses in all—5 houses, 10 feet wide, 65 feet long; 4 houses, 18 feet wide, 65 feet long; 1 house, 18 feet wide, 65 feet long. Steam plant! New double Florida Boiler. Stock in good condition, with a large and extra good home market. This is an opportunity in a life-time, as present owner has other interests to look after. If you are looking for a chance, apply at once to

N. D. WINTER,
5 Elm Street, SPRINGFIELD, MASS.

TAKE YOUR CHOICE.

FOR SALE—An old established Florist Business at Dorchester, Mass., comprising 20,000 feet of land centrally located, on which are: 1 house 70x18 filled with Carnations; 1 house 70x16 filled with Roses; 1 house 70x11 filled with Violets; 1 house 70x10 filled with Violets; 1 sash pit 70x7 filled with Violets; 1 dwelling house 7 rooms. Plants in good condition and houses in good repair. Price $6,000.

FOR SALE OR RENT—A well equipped establishment within eight miles of Boston, comprising 8 acres of land on which are 1 house 120x20 filled with Mermets and Silver Sprays; 1 house 100x24 filled with Wilders and Plants; 1 house 100x11 filled with Wilders; 1 house 100x11 filled with Adiantums, 9-in. pots; 1 house 100x11 filled with Callas and Bouvardia; 1 house 100x11 filled with Callas, Bouvardia and Portia; 1 house 100x11 filled with Violets and Mignonette; 1 heated frame 100x6 filled with Mignonette; 1 propagating house 75 ft. long. Price $22,000.

FOR SALE—Eight miles from Boston. 1 acre of land, 8,000 feet of glass, including 4 houses, 100x18, 1 dwelling house 7 rooms. Apply to

N. F. McCarthy & CO. 1 Music Hall Place, Boston Mass.

For Sale by Tender.

Tenders will be received by the undersigned until the 15th of May ensuing, for the real estate, stock and business of the Halifax and Amherst Nursery Co,—either separate or en-bloc.

The Halifax Nursery has been long established and enjoying a very extensive and satisfactory business connection. The nursery and buildings cover an area of about 4-5 of an acre. On the premises are three green-houses, 100x17, one 100x24, one 60x15, workshed 80x20, under which are the heaters. The houses are well stocked with the best varieties of all kinds of useful and ornamental plants. In the ground there are very valuable collections of hardy herbaceous plants, shrubs and trees.

Also a good stable, coach house, pit and frames and necessary requisites to conduct the business.

The Amherst Nursery—embracing an area of about two acres, is situated in a flourishing part of the Province in a thriving town of the same name. The buildings consist of dwelling house, two green-houses 70x21, well stocked with all the requisites necessary for a good local trade.

The highest or any tender not necessarily accepted. For particulars and reasons of sale,
Address

Dr. C. O. Tupper,
AMHERST, N. S., Canada.

ASSIGNEE'S PUBLIC SALE.

COTTAGE PLACE GREENHOUSES.

On Monday, May 29th, 1893, the undersigned assignee of A. Bitner and wife, will by virtue of an order of the Court of Common Pleas of Lancaster Co., Penn., sell at public sale at the Leopard Hotel in Lancaster, Penn., the celebrated Cottage Place Greenhouses, adjoining Lancaster, with city office No. 16 Center Square.

These well known greenhouses will be sold in two parts The older part, being all east of West street, consisting of 15 greenhouses, with about 30,000 square feet of glass, three large boilers, pumping engine, two stand pipes, containing 70,000 gallons, wells, pumps, steam heating pipes, etc., etc., together with boiler house, stable, wagon shed, and other necessary buildings.

Second; the new plant, consisting of a lot of ground, 208 feet front on the west side of West street, and 160 feet deep, on which are erected 10 greenhouses, with about 20,000 square feet of glass and two large boilers in position. This plant is not finished, the pumping and heating arrangements not being completed.

A very accurate map of these properties can be seen at the office of W. F. Beyer, Esq., No. 43 Grant street which intending purchasers should consult.

Lancaster County, Penn., is recognized everywhere as the "garden spot" of the Union, and the soil of this locality is unequalled even in this county for the production of roses, carnations, and indeed all kinds of flowers.

The advantages for shipping are unexcelled, having both the Pennsylvania and the Reading systems, with all their connections.

To those desiring to enter the greenhouse business this sale offers the best possible opportunity.

Mr. A. Bitner, adjoining the premises, will show the properties.

Sale to begin at 7:30 P. M., when terms will be made known by

R. J. HOUSTON,
Assignee of A. Bitner and wife.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.
JOHN G. ESLER, Seo'y F. H. A., Saddle River, N. J.

SAN JOSE, CAL.—The first exhibition of the Santa Clara County Floral Society will be held in this city this week.

BILTMORE, N. C.—Mr. Robert Bottomly, of Staten Island, N. Y., has arrived here and expresses himself as greatly pleased with his new home.

PLEASANT HILL, MO.—On April 24 we had the worst hail storm known here in 10 years. Three-fourths of the glass on Geo. M. Kellogg's grenhouses was broken. The loss is very heavy.

LANCASTER, PA.—In consequence of the failure of Mr. A. Bitner, brought about by unfortunate investments, mainly in the Lancaster Watch Factory, his greenhouse establishment, known as the Cottage Place Greenhouses, will be sold at public sale May 29, by the assignee.

SAN ANTONIO, TEXAS.—The annual "Flower Festival" was held April 21, it being "San Jacinto day," in commemoration of the battle of San Jacinto, by which Texas freed herself from Mexico. It was a grand affair this year, as our beautiful Alamo city is a mass of the choicest roses, from centre to circumference.

LAFAYETTE, IND.—Fred Dorner & Son had a very severe loss by hail April 28, 10,000 square feet of glass being broken. Out of 3,700 square feet of single thick glass 1981½ square feet were broken. Out of 21,000 square feet of double thick glass 6,000 square feet were broken. The balance of the glass was single thick and in movable sash. These were a complete loss, as about every glass was broken. With the exception of the movable sash, the greater part of the glass was insured. Stock was damaged to a great extent.

COLUMBUS, O.—The favorable weather brought out great quantities of plants on the markets at Easter, and good specimens sold moderately well. There was however, a noticeable increase in the demand for good cut-flowers, and the orders received were very satisfactory in every way. There was very little work to make up, the demand being principally for boxes of loose flowers and the individual orders were much larger than formerly. The supply was about equal to the demand. With the exception perhaps of roses and carnations, prices were increased but little over the week before.

Mexican Primroses (Œnothera Rosea).

Fine plants, per 100, Apple Blossom, $3.00; Hermosa tinted, $3.00; Cooperia Pedunculata, 1st size, $3.00; 2nd size, $2.50; Cooperia Drummondii (ready in May) $1.50; Zephyranthes Andersonii Texana (May), $1.50; Crinum Zeylanicum, C. Careyanum, C. Sanderianum, C. Latifolium, $2.00 each, $20.00 dozen.

Carriage paid when cash accompanies order.

MISS LIZZIE FREEMAN,

1203 East Ave., AUSTIN, TEXAS.

THE GREAT ANTIPEST.

For particulars, see next week.

R. W. CARMAN, GEN'L AGT.,

291 Amity Street, FLUSHING, Queens Co., N. Y.

PARFUGIUM GRANDE.

First-class plants. Price $8.00 per 100; $1.25 per dozen, by mail. Postage prepaid.

TILTON BROTHERS, 222 Grove St., Aurora, Ill.

PANSIES 1st Class Ones in bloom, will please you. Here they go at $2.25 per 100; $20 per 1,000.

W. J. ENGLE, box 211, Dayton, O.

BOUVARDIAS, rooted cuttings, $1.50 per 100. Mme. Crozy Cannas 10 to 15 cts. Write for special low prices for 2 year climbing and moss roses.

McREA & COLE, Battle Creek, Mich.

ROOTED CUTTINGS.

Alternanthera, Versicolor, Tricolor and Aurea Nana	per 100	.50
Alternanthera Paronychiodes	"	.50
Coleus, best old and new	"	$1.00

PLANTS.

Fuchsia Trailing Queen	per doz.	.50
Begonia assorted	per 100	$4.00
Mexican Primroses, 3 varieties	"	3.00
Fuchsia, best varieties	"	3.00
" Storm King and Phenomenal	"	4.00
Echeveria Glauca	"	$3 x 4.00
" Extensa Globosa, for centers, plants six inches across	each	.25

Price List on Application

ROBT. S. BROWN & SONS,

Box 99, Kansas City, Mo.

ROSES,

CARNATIONS AND VIOLETS,

STRONG PLANTS,

WRITE FOR PRICES.

Kemble Floral Co.,

OSKALOOSA, IOWA.

25,000 PANSIES The Jennings strain, extra fine plants in bud and bloom, $2.00 per 100. Medium size plants, will flower soon, $1.00 per 100; $9.00 per 1,000. Fine clumps Snow Flake Daisies in bloom, $2.00 per 100, by express only. Pansy Seed $1.00 per package.

E. B. JENNINGS, PANSY GROWER.

Lock Box 254. SOUTHPORT, CONN.

COLEUS.

Standard Sorts, $2.25 per 100; $20 per 1000.

My Specialty: Golden Bedder and Verschaffeltie, $2.50 per 100; $22.50 per 1,000; 2½ inch pots; ready now. Any quantity. Cash with order.

C. F. FAIRFIELD.

SPRINGFIELD, MASS.

Maianthemum Bifolium—clustered white flowers and deep green leaves—very effective for decorative work, $1.75 per 100. Euphorbia Corollata—a fine forcing plant, $2.00 per 100. Phlox Subulata—for bedding, $2.00 per 100. Osmunda, $2.00 per barrel. Trillium Grandiflorum Maximum, $5.00 per 100.

W. A. BROTHERTON & CO.,

ROCHESTER, MICH

Mention American Florist.

Tuberous Begonias.

Seedling Plants Now Ready.

Best Single or Double ones, colors mixed, mailed at $3.00 per 100. A different strain at $2.50, single only. We have a few good sound tubers left. Write us if you want any.

BRAUER & RICHTER

. . MCCONNELSVILLE, O.

PANSIES 50,000 Large transplanted plants, grown in flats 4 square inches to the plant. $1.25 per 100; $10.00 per 1,000, by express. These are A No. 1 plants grown from the finest seed in the market. They are very stocky; 35 cents extra per 100 will be required if wanted by mail.

J. F. ROSENFIELD,

WEST POINT, - - NEBRASKA.

STRING

Your Smilax and other trailing plants with

GREEN SILKALINE.

Same cord can be used with plants when decorating. For samples and prices, address

JOHN C. MEYER & CO.,

289 Devonshire Street, BOSTON, MASS.

CATALOGUE PRINTING.

ELECTROTYPING.

Done with expert ability for Florists, Nurserymen, Seedsmen. Write to

J. Horace McFarland Co.,

HARRISBURG, PA.

Mention American Florist.

ROSES

AMERICAN BEAUTY, 2½-inch pots $8.00 per 100. Also Bride, Mermet, Hoste, Wootton, Perle, Sunset, Meteor, Gontier, Cusin, Watteville, La France, $6.00 per 100; $50.00 per 1000.

MME. TESTOUT, $25.00 per 100.

CARNATIONS

DAYBREAK, $3.00 per 100; $25.00 per 1000. Portia (selected and extra selected), W. F. Dreer, Fred Creighton, Hinze's, Puritan, Lizzie McGowan, Grace Wilder, White Dove, Crimson and Peachblow Coronets, rooted early, very strong and healthy. In flats and in pots. Prices on application.

CANNAS

	Per 100
Mme. Crozy, fine plants	$15.00
Admiral Courbet, fine plants	8.00
Premices de Nice, fine plants	5.00
President Faivre	5.00
French Cannas, mixed	5.00

EDWIN LONSDALE,

WYNDMOOR, Chestnut Hill P. O., PHILA., PA.

WANTED.

ROSE PLANTS.

100 J. B. Varrone.
300 Bon Silene.
200 Mad. Welche.
200 Queens.
300 Coquette des Alpes.
300 General Washington.
300 Mad. Charles Wood.
300 Mrs. John Laing.
200 Hermosa.
500 Malmaison.
100 Isabella Sprunt.
200 Captain Christy.
200 Queen of Queens.
300 Giant of Battles.
200 Xavier Olibo.
100 Golden Gate.

The NATIONAL PLANT CO.

DAYTON, OHIO.

ROSES.

METEOR, 2¼ inch $8.00 per 100.
PERLES, 2¼ inch, $5.00 per 100.
PERLES, 2¼ inch, $45.00 per 1,000.

JOHN BURTON,

Chestnut Hill, PHILADELPHIA, PA.

ANCHORAGE ROSE CO.

MARIE LOUISE VIOLETS

Absolutely free from disease. Established in 2½ inch pots.

$25.00 per 1,000. Rooted Cuttings, $5.00 per 1,000.

Anchorage Rose Co., Anchorage, Ky.

Cycas Revoluta

The Largest and Best Selected Stock of Cycas Revoluta, fronds and roots cut off, true long leaved variety, now on hand.

For general Japanese and Australian stock, apply to

F. GONZALES & CO.,

303-312 Wayne St., SAN FRANCISCO, CAL.

Send for catalogue

The Grand New Forcing Rose,

"American Belle."

Prices and full particulars on application.

John Burton, Chestnut Hill, Philadelphia.

SUNNYWOODS

CUSINS & WATTEVILLES

Please write for prices.
Orders for

BRIDESMAIDS

are being booked now for delivery in

JUNE.

FROM 2¼-INCH POTS { $15 per 100 Plants.
PRICE ..... { 10 per 50 Plants.

FRANK L. MOORE,

. . . . . CHATHAM, N. J.

Golden Returns.

200,000 ROSES 200,000

We offer well established, healthy plants in below named and many other sorts:

From 2-inch pots, $ 3.00 per 100; $30.00 per 1000
From 3-inch pots, 6.00 " 60.00 "
From 4-inch pots, 12.00 " 120.00 "
Not in excess of any one variety.

50,000 Hybrid Perpetual Roses 50,000

at $4 per 100; $40 per 1000, in 50 select varieties.

New and Rare Varieties at Special Rates given in our Wholesale List, now ready.

WE NAME A FEW SORTS ONLY:

Aurora, Bosanquet, Comt. de Labartbe, Bon Silene, Cels, Devoniensis, C. Mermet, Etoile de Lyon, Hermosa, Mme. Cusin, H. M. Stanley, Malmaison, Marie Guillot, Mme. Lambard, Marie Lambert, Marechal Niel, Kruger, Niphetos, Mme. Jos. Schwartz, Safrano, Perle des Jardins, Sombreuil, The Bride, etc., etc.

For anything in the Florist line, or send your lists to oe priced. Address

NANZ & NEUNER,
LOUISVILLE, KY.

ROSES

I grow all the leading forcing varieties such as

Mme. Testout, K. A. Victoria

Meteor, Wootton, Beauty, Perle, Bride, Mermet, Watteville, etc.

Let me figure on your order for May, June or July delivery, for first class stock.

MUMS. A good stock in 2-in. pots of all the leading cut flower and commercial varieties at $3.00 per 100; $25.00 per 1,000. Guaranteed true to name.

W. W. COLES, KOKOMO, IND.
Maple Hill Rose Farm.

The New White Rose
KAISERIN AUGUSTA VICTORIA.

From 3-inch pots, $25.00 per 100.

JOHN COOK,

318 N. Charles St., BALTIMORE, MD.

NEW BEDDING BEGONIA
THURSTONII.

Strong plants, $1.00 per dozen; $6.00 per hundred.

J. E. BONSALL & SON, 308 Garfield Ave., Salem, O

Always mention the American Florist when writing to advertisers.

This Year's Buyers Say:

"BEACENDALE, Ontario, Canada, April 21, '93—The Rooted Rose Cuttings came to hand in great shape—just as fresh as spring daisies, and are doing well."

"PEARL RIVER, N. Y., April 10, '93—Received second shipment of Bride cuttings in good condition. The first shipment I had no trouble with, and they are growing very nicely."

"YORKVILLE, N. Y., March 21, '93—The cuttings arrived in good condition, and are satisfactory."

"CEDAR FALLS, Iowa, March 13, '93—Cuttings received O. K.—nicest cuttings and best packing ever saw shipped here. Will try you again."

"NEW HAVEN, Conn., March 20, '93—Rooted Rose Cuttings received in good shape, only a few of the roots broken."

CAMDEN, N. J., March 21, '93—Received the Rose Cuttings and found them very nice."

"HAGERSTOWN, Md., March 20, '93—Rooted Rose Cuttings arrived in good condition—don't have any trouble with them at all; don't expect to lose one in a hundred."

"HANNIBAL, Mo., March 20, '93—I have received your plants in good order. Thanks."

"TRINIDAD, Col., March 16, '93—Rose Cuttings received in due time, and first class condition. They are now looking fine. Many thanks for the careful packing."

"SEILING, Ills., March 28, '93—Rooted Rose Cuttings arrived in good condition, perfectly fresh and well rooted."

Our Special Offer:

With every $5.00 worth of Rooted Cuttings or Plants, ... we shall . . . . . .

GIVE YOU Ten Strong Plants of the Wonderful New Rose, CHRISTINE DE NOUE. . . . . .

C. STRAUSS & CO.

Largest growers of Roses for Cut Flowers in the world. * **WASHINGTON, D. C.**

MADAME CAROLINE TESTOUT.

The best rose of its color in existence. It has been fully tested in the New York market and

IT SELLS.

Healthy plants from 2½-inch pots now ready. Per 100, $25 00; per 1000, $200.00; 500 at 1000 rates.

ERNST ASMUS, West Hoboken, N. J.

ROSES FINE HEALTHY PLANTS FROM 2¼-INCH POTS.

Perles, Brides, Mermets, Niphetos, Papa Gontier, Hoste, Watteville, Cusin,
La France, Albany, Wootton, at . $5.00 per 100, $45.00 per 1,000.
Meteor at . . . . . $6.00 per 100, $55.00 per 1,000.
Climbing Perle, at . . . . . $10.00 per 100.

John Henderson Co.,

FLUSHING, N. Y.

Mention American Florist.

Hybrid Perpetual Roses,

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.

Price Lists to applicants. Address

WILLIAM H. SPOONER,
JAMAICA PLAIN, (Boston), MASS.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST. . . . . .

ANCHORAGE ROSE CO., Anchorage, Ky.

ROSES.

TEAS . . . . . $30.00 per 1000
HYBRIDS . . . . . 40.00 per 1000

Healthy plants, in 2-inch pots.

Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.

Trade list on application.

Jacob Schulz
LOUISVILLE

ROSES.

Finest stock in Northwest

Duchess of Albany, Mme. Hoste,
La France, Niphetos,
Catherine Mermet, Perle,
Waban, Sunset,
The Bride, W. F. Bennett.

C. A. SMITH FLORAL CO.

77 7th Street, South, MINNEAPOLIS, MINN.

Mention American Florist.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; 1inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

WE request subscribers to make remittance by draft or money order when renewing subscriptions, and to keep a record of the numbers and dates of same. This is to guard against losses in the mails.

TRAILING ARBUTUS

By the Basket, received daily from the woods.

WISCONSIN FLOWER EXCHANGE,
131 MASON STREET,
MILWAUKEE, WIS.

Cape Flowers, new crop in best white quality at $1.25 the lb.; 10 lb. lots, $10 net.

Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 30-in. upwards, at 45c., 50c., 60c., 75c. and $1.00 each, according to length.

Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.

Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.

Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc. For prices consult our

Trade Catalogue, mailed free.

August Rölker & Sons,
136 & 138 W. 24th St., P. O. Station E. New York.

IF YOU NEED ANY

Cape Flowers, Immortelles, Grasses, plain or fancy **Baskets, Metal Wreaths, Letters, Doves,** or any other thing in the Florists' supply line, mail us your order.

REMEMBER WE ARE THE

Leading Manufacturers of Wheat Sheaves and Baskets, and Importers of **Florists' Supplies.**

Catalogue on application.

ERNEST KAUFMANN & CO.,
113 N. 4th Street, PHILADELPHIA, PA.

ALL READY

FOR

DECORATION DAY AND COMMENCEMENTS

Commencement • • •
Baskets at prices which cannot be undersquoted by any one.

Celluloid Baskets, Silver Jardiniers, Silver Handle Baskets, Metal Wreaths.

All our own manufacture. New stock now ready for inspection.

WHOLESALE ONLY.

H. BAYERSDORFER & CO.
56 N. FOURTH STREET, PHILADELPHIA, PA.

T. J. CORBREY & CO.
WHOLESALE AND COMMISSION FLORISTS,
45 LAKE STREET.
CHICAGO.
(IN CHICAGO CUT FLOWER EXCHANGE.)

Asparagus Plumosus Nanus.
CUT STRINGS: 6 to 10 feet long, 50 cents each. 12 to 18 feet long, $1.00 each.
In large or small quantities all the year round. The largest stock in the country.
W. H. ELLIOTT, Brighton, Mass.

WHOLESALE FLORISTS
La Roche & Stahl
N. E. CORNER 13th & Chestnut Sts., PHILADELPHIA.

SAMUEL S. PENNOCK,
Wholesale Florist
REMOVED TO REAR OF 42 S. 16th ST.,
Philadelphia, Pa.

MARSCHUETZ & CO.,
FLORISTS' • SUPPLIES
23 & 25 N. 4th St., PHILADELPHIA, PA.
Send for Catalogue.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE
FLORIST,
1122 PINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STEET,
St. Louis, Mo.

THE SMILAX KING!
Who? KOFFMAN,
Where? WALDEN, Orange Co., N. Y.
What? SMILAX
25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.
When? ALL THE YEAR AROUND.
And he pays the Express.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.

	Per 100
Perle, Gontier, Niphetos	$ 4.00
Mermets, La France, Bride, Wootton	6.00
Meteors	8.00
Jacqs	12.00
Carnations, short	1.00
" long	2.00
" " fancy	2.50
Romans, Valley, Narcissus, Tulips	3.00
Violets, Adiantum	1.00
Callas, Harrisii	10.00
Smilax	20.00

In effect till next issue of this paper.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
116 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.: Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange,
45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY & CO.
Wholesale and Commission
FLORISTS,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

A. G. PRINCE & CO.,
Wholesale and Commission
FLORISTS,
45 LAKE STREET,
In Chicago Cut Flower Exchange. CHICAGO.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

WHITE DOVES
FOR FLORISTS.
Largest and finest stock in the United States. Write for prices to
S. J. RUSSELL,
103 Van Winkle St., Jersey City, N. J.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

Wholesale Markets.

Cut Flowers.

NEW YORK, May 2.

Roses, Bon Silene, Gontiers	1.00@ 3.00
" Perles, Niphetos	2.00@ 3.00
" Mermet, Bride, Hoste	3.00@ 5.00
" Cusin, Watteville	3.00@ 4.00
" Bridesmaid, La France	5.00@ 6.00
" Meteor	2.00@ 4.00
" Jacquemiinot	6.00@12.00
" Beauty	30.00@40.00
" Hybrids	10.00@30.00
" Mme. Caroline Testout	10.00@20.00
Carnations	1.00@ 2.00
Valley, hyacinths, tulips, daffodils	2.00@ 3.00
Harrisii	2.00@ 5.00
Callas	3.00@ 6.00
Cattleyas	50.00
Mignonette	1.00@ 5.00
Adiantums	1.00
Lilac (bunch)	1.00
Smilax	35.00

BOSTON, May 2.

Roses, Niphetos, Gontier	4.00@ 6.00
" Perle, Sunset	4.00@ 6.00
" Bride, Mermet	6.00@ 8.00
" Jacq., Lutizet	12.00@25.00
" Brunner	25.00@40.00
Carnations	1.50@ 3.00
Violets	.50@ .75
Lilies, Harrisii and Longiflorum	4.00@ 6.00
" Candidums	3.00@ 5.00
Lily of the valley, tulips, daffodils	2.00@ 3.00
Narcissus Poeticus	1.00@ 2.00
Mignonette	2.00@ 4.00
Heath, per bunch	50 to 75 cents
Adiantum	1.00@ 1.50
Smilax	25.00@35.00
Asparagus plumosus	50.00@100.00

PHILADELPHIA, May 2.

Roses, Brunners	10.00@35.00
" Lalings	15.00@30.00
" Beauties	20.00@35.00
" Belles	35.00
" La France, Mermet, Bride	4.00@ 6.00
" Cusin, Watteville	3.00@ 5.00
" Jacqs	8.00@10.00
" Perle, Gontier	2.00@ 5.00
Valley	2.00@ 3.00
Carnations	.75@ 1.25
Daffodils, tulips	3.00@ 4.00
Mignonette	1.00@ 2.00
Asparagus	60.00@75.00
Smilax	20.00@25.00
Adiantum	1.00@ 1.25
Harrisii	5.00@ 8.00
Callas	5.00@ 8.00
Sweet peas	1.00@ 2.00

CHICAGO, May 2.

Roses, Perles, Niphetos Gontier	3.00@ 4.00
" Mermet, La France, Albany	4.00@ 5.00
" Brides, Wootton Bennett	4.00@ 5.00
" Beauties	10.00@15.00
" Jacqs	12.00@18.00
" Hybrids	12.00@18.00
Carnations (short)	.75
" (long)	1.00@ .50
" (fancy)	2.00
Callas, Harrisii	10.00
Romans, Valley	3.00
Violets	1.00
Sweet Peas	1.50@ 2.00
Daffodils, tulips	3.00@ 4.00
Smilax	20.00
Lilac (per bunch)	.35c.

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., BOSTON, MASS.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
The finest Roses, Violets and Carnations
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

GEO. MULLEN,
WHOLESALE FLORIST
Florists' Supplies Always in Stock.
7 PARK STREET,
BOSTON, MASS.
Orders by Mail, Telegraph, Telephone or Express promptly filled.

The Seed Trade.

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1895. Applications for membership should be addressed to Wm. Meggatt, chairman membership committee, Wethersfield Conn.

Turnip Seed.

It is reported there is and will continue to be this season, a great scarcity of turnip seed, not only in the United States, but in both England and France. As turnip seed is a very important item in the seed trade of this country, this scarcity will necessarily make it very high—in fact the large jobbing houses have already been compelled to advance the price, and as there are over 6,000,000 pounds of seed annually sold in the United States, and the most of it during July, August and early September, the great question arises where the supply is to come from this season. No doubt some of the large jobbing houses who have been almost giving turnip seed away for the past two or three years, would feel very happy if they had that stock on hand now.

This information is based on substantial facts, and not offered as a means of booming prices, as was the case with onion seed the past season, which failed so dismally, there being more onion seed in this market than was generally supposed, and while many dealers were holding their stock for higher prices, the market was being quietly fed by some of the larger houses of this country and Europe.

Philadelphia. ROBT. BUIST, JR.

Government Seeds.

The following letter is being very generally sent out to the American seed trade by the new Secretary of Agriculture. It would indicate a very promising spirit of reform existing in that department at present.

"Will you kindly inform me what seeds you furnished the Department of Agriculture during the years 1892 and 1893, and give me the price respectively for each variety, carrying out the aggregate amount which the Government paid you for seeds in each year separately.

"Then state what seeds you will have for sale during the autumn of 1893 and during the winter and spring of 1894, putting your lowest price upon each variety. The intention of this department is to buy the best possible seeds for the least possible money, and, therefore, each dealer with whom the department has had any transactions heretofore is addressed in this manner. The intention being to buy the seed as cheaply for the Government as individuals endeavor to purchase them for their own use."

MR. EDWIN C. JOHNSON, manager E. J. Bowen, Portland, Oregon, is making a business trip through the east.

THE NORTHERN N. Y. and Canadian seed growers report the season two weeks late and present outlook gloomy.

We Sell Bulbs!
Special Prices on Application.
Weeber & Don
Seed Merchants and Growers,
114 Chambers St, NEW YORK.

We Grow.....
BULBS
SEGERS & CO., Bulb Growers,
LISSE near HAARLEM, HOLLAND.
Catalogues will be mailed free upon application if not received.

GT. VAN WAVEREN & KRUYFF,
— Special Growers of —
Dutch Bulbs and Flower Roots.
Mr. Gerard Kruyff has come personally to make a trip through the United States, to contract with buyers, and offers a large stock of first quality goods. Parties interested in the Bulb trade are requested to correspond. Send lists for estimates to
Gerard Kruyff,
ASHLAND HOUSE, FOURTH AVE., NEW YORK CITY.

R. VAN DER SCHOOT & SON,
HILLEGOM, - HOLLAND,
Largest Growers of
HYACINTHS, TULIPS, NARCISSUS,
SPIRÆA, LILIES OF THE VALLEY, ETC.
HEADQUARTERS FOR HIGH GRADE FORCING BULBS.
Wholesale Importers should write us for Prices.
OUR NEW TRADE LIST NOW READY.

HULSEBOSCH BROS.,
BULB AND PLANT GROWERS,
OVERVEEN, near Haarlem, HOLLAND.

	Per 100	1000
Lilium Harrisii, 4 to 5-inch in circ	$2 20	$19.00
" " 5 to 7-inch in circ	3.00	24.00
" " 7 to 9-inch in circ	5.25	47.00
" " 9 to 12-inch in circ	11.00	100 00
Lilium Longiflorum 10 per cent dearer than Lilium Harrisii.		
Roman Hyacinths, extra selected	2 50	22.00
" " top roots	3.00	25.00
Narcis. Totus Albis, extra selected	1.00	7 50
" " Grandiflor'm, ext s'le'd	1 30	11 00

Fall Wholesale Catalogue now ready. Address
A. HULSEBOSCH,
P. O. Box 3118. Warehouse 58 West Street,
NEW YORK CITY.

DUTCH BULBS.
HYACINTHS, TULIPS, NARCISSUS, ETC. FIRST QUALITY IS THE BEST.
I have gained the reputation of having the finest bulbs of Holland, and if you would have the VERY BEST send me a trial order
Two important items, viz.
Quality the Best. Prices the Lowest.
Price list free on application
JOHN BARTH BOS,
Bulb grower. Established 1868.
Overveen near Haarlem, Holland.

LILIUM HARRISII.
Original and largest growers of this important bulb.
OUR SPECIALTY!
True Stock. Lowest Prices. Best Quality.
F. R. PIERSON CO.,
TARRYTOWN-ON-HUDSON, NEW YORK.

BENJAMIN RIMBAUD, BULB GROWER,
Quartier du Temple, Toulon, var, France.
Cable address Benrimbaud, Toulon.
The largest cultures in the South of France, of WHITE ROMAN HYACINTHS, Narcissus Paper White grandiflora, N. Double Roman, N Double Von Sion, true pure yellow, and other Daffodils. Lilium Candidum, the largest bulbs. Freesias. Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A Double Rosette the earliest, etc. Prices on application

Send for Catalogue of
JAPAN BULBS, SEEDS, AND SHRUBS.
ARAUCARIAS,
AUSTRALIAN Palm Seeds,
CALIFORNIA BULBS AND SEEDS to
H. H. BERGER & CO.
ESTABLISHED 1878. SAN FRANCISCO, CAL.

TUBEROSES.

☞ We are headquarters	Per 100	Per 1,000
1st size Dwarf Pearl	$1 50	$12 00
2d size "	80	6 50
1st size Tall Pearl	1 20	10 00
Gladioli, extra large, finest sorts	1 25	12 00

H. G. FAUST & CO.,
64 and 66 N. Front St., PHILADELPHIA, PA.
WOODLAWN FARMS, 1,300 ACRES.

Lily of the Valley Bulbs.
THE STAR BRAND
SPECIALLY RECOMMENDED FOR LATE FORCING.
We are now booking import orders for shipment from Hamburg in October or November
REISS & BRADY,
280 Washington Street, New York.

FORCING BULBS,

HYACINTHS, TULIPS, DAFFODILS,

And all other bulbs for forcing and outdoor, in very fine quality, at reasonable rates.

If any of our friends have not received a copy of our Catalogue of 1893, should write for one at once.

Please ORDER ON RECEIPT of our Catalogue.

SEGERS BROTHERS,

WHOLESALE BULB GROWERS,

LISSE, near Haarlem, **HOLLAND.**

Chrysanthemums.

The plants are in pink of condition.

J. N. Girard,	not less than 5 plants,	4c
V. H. Hallock	"	4c
Mrs. Langtry	"	4c
Mrs. Humfrey	"	4c
W. W. Coles	"	4c
Louis Boehmer	"	4c
Mrs. F. Thompson	"	4c
Elmer D. Smith	"	4c
Frank Thompson	"	4c
Mrs. J. Westcott	"	4c
Alcazar	"	4c
E. G. Hill	"	4c
La Fortune	"	4c
Minnie Wanamaker	"	5c
Waban	"	5c
Potter Palmer	"	6c
J. C. Vaughan	"	6c
Annie Manda	"	6c
E. D. Adams	"	6c
Mrs. W. T. Kimball	"	6c
E. Asmus	"	6c
Gov. Fifer	"	6c
Roslyn	"	8c
Spartel	"	8c

S. Pickelman,

352 William St., BUFFALO, N. Y.

NEW AND GRAND

CHRYSANTHEMUMS.

For 1893.

Japanese Novelties and California Seedlings.

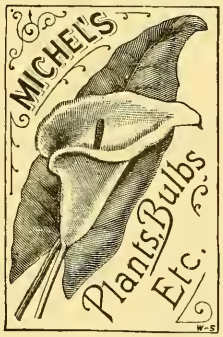
Monarch of Ostrich Plumes. Chrome yellow shaded amber, hairy. **Empress of Russia,** snow white, hairy. **Master of Ostrich Plumes,** maroon, reverse gold, hairy. **Fairy Queen,** a delicate pink, hairy. **Princess of Japan, The World,** etc. Send for catalogue.

JAPANESE NURSERY,

H. YOSHIIKE, Prop.

Cor. 16th & Willow Sts OAKLAND, CAL.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.



Write for wholesale list.

MICHEL PLANT AND BULB CO.,

ST. LOUIS, MO.

Fresh From Japan.

Sound Bulbs of

Lil. Auratum, 7 to 9 inch, $9 00 per 100.
Lil. Rubrum, 7 to 9 inch, $9.00 per 100.

Import prices on first class Fall Bulbs way down.

W. W. BARNARD & CO.,

6 and 8 N. Clark St. CHICAGO.

G. J. MOFFATT,

Manufacturer of

PAPER BAGS AND ENVELOPES

Special attention given to

Seed Bags and Catalogue Envelopes.

NEW HAVEN. CONN.

Kills Mildew and Fungus Growth. What does? **GRAPE DUST.**

Sold by Seedsmen.

Siebrecht & Wadley,

ROSE HILL NURSERIES,

NEW ROCHELLE, N. Y.

Palms,

ORCHIDS,

Roses,

and New Plants.

FRESH DRACAENA CANES NOW READY.

ORCHIDS.

The Finest Stock in the World.

SANDER'S,

ST. ALBANS,

ENGLAND.

Thirty minutes from London.

Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street New York City

---

Orchids Cheap as Good Roses.

BRACKENRIDGE & CO.,

Established 1854. **Govanstown, Md.**

PRICE LIST FREE.

1,000,000 CANE STAKES

COLEUS AND GERANIUMS

Cuttings and potted plants.
Wholesale and Retail. . . . .

CHAS. A. BAIRD, Manalapan, Mon. Co., N. J.

D. H. ROBERTS,

159 & 161 South 5th Ave., New York

NATURAL GAS MADE GLASS

for Rose Houses, Conservatories, etc., etc.
Our glass received the highest award at the Boston Convention of the S. A. F.

Baltimore.

The public squares are a blaze and a glory of tulips and hyacinths; so are the windows of the florists, notably, Mr. Seidiwitz's, who has one hundred and fifty varieties on exhibition. The plant men are too busy to talk, but judging from the stock in the houses they expect to do a big business. Flowers generally are a little scarce excepting, of course, shrubbery and Dutch bulbs. Violets are done, roses are getting scarcer every day, and house flowers are getting their summer paleness and weakness in an unmistakable degree.

At the Club meeting an addition was made to the chrysanthemum show premium list of first and second premiums of thirty and twenty dollars for the largest chrysanthemum plant. Now let the boys look out for giants. The question of starting a hail insurance in the club was debated at some length, most of the members seeming to think the present system best, but one suggesting that hail insurance would prove as profitable as life insurance in which we are already engaged. There was a report from the committee on establishing a purchasing agency, but as it was not conclusive the committee was continued. There seems to be some difference of opinion on the usefulness of the projected agency and members are disposed to go slow until satisfied of its being an improvement on the present system. No doubt if all members would purchase all seed, bulbs, plants, paint, lumber, glass and coal through it there would be a great saving; but, can they be depended upon to do it? And will it pay if only a few buy part of their things through it?

MACK.

Brampton, Ont.

Harry Dale is placing foundations for four large rose houses, 350x21. The glass will be butted and capped, and the short span will be to the south.

R. Jennings hopes to erect another house or so during the coming summer; he reports a brisk trade. B.

COLEUS, ROOTED,

Leading varieties, $1 per 100; $8 per 1,000, including the finest yellow Coleus in cultivation; a new variety, equal to Golden Bedder in color, and as good a grower as Verschaffeltii.

—PANSIES—

Fall Seedlings, a splendid strain, $5 a 1,000; 500 at 1,000 rates. 10c per 100 extra where shipped by mail.

JAMES HORAN,

FLORIST, BRIDGEPORT, CT.

GUTTINGS

Carnations- Lizzie McGowan, Grace Darling and Aurora.
French Canna—A fine assortment of the best varieties only at $4.50 per 100, or $35.00 per 1000
Seedling Verbena, Mammoth Strain—Select and finest colors good stocky plants at $1.00 per 100.

Terms Cash. Correspondence Solicited.

ALBERT M. HERR, Lock Box 496, Lancaster, Pa.

ORDERS BOOKED NOW FOR MY SPECIALTIES FOR 1893.

NEW JERSEY—A Scarlet Carnation hard to beat, $12.00 per 100. OLD ROSE. Old Rose Pink Carnation, $12.00 per 100. NELLIE BOWDEN. Pure Bright Yellow Carnation, $40.00 per 100.

Now Ready. Other varieties of Carnations, both old and new.

JOHN McGOWAN, ORANGE, N. J.

GROZY CANNAS.

WE ARE HEADQUARTERS . . for all the Novelties, and in addition control EXCLUSIVELY several grand varieties which we now offer for the *first time*. We will not be undersold on any of the list.

J. C. VAUGHAN,
New York: CHICAGO.
26 Barclay Street. P. O. Box 688.

Greenhouses: Western Springs. . . .

* Rooted Cuttings. *

COLEUS FOR YOU ALL!

Golden Bedder and Crimson Verschaffeltii specialties, $6.00 per 1000. Fuchsias, Storm King, Moles Worth, E. G. Hill, Phenomenal, Jupiter, Black Prince, and others, $1.00 per 100. Ageratums, dwarf, blue and white, 75c per 100. Heliotrope, 4 sorts, $1.00 per 100. Few fine Standard Dwarf, $1.50 per 100, from flats $1.50. Pansies, Hybrid, Butterfly and Trimardeau, seed bed, 40c per 100; transplanted, 60c per hundred.

CASH WITH ORDER.

J. E. FELTHOUSEN,
SCHENECTADY, N. Y.

TRY DREER'S GARDEN SEEDS,
Plants, Bulbs & Requisites.
They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.
HENRY A. DREER,
Philadelphia, Pa.

ROOTED CUTTINGS
Of the Best Old and Most Promising new varieties of
CARNATIONS.
Write for a catalogue and send list of wants for an estimate.
J. J. Styer,
CONCORDVILLE, PA.

ROOTED CUTTINGS of CARNATIONS
By the Wholesale.
Ready now. This is the best time for intending buyers to supply themselves, offer them at moderate prices. Send for Price List. Address
JOSEPH RENARD, Unionville, Chester Co., Pa.

CARNATION CUTTINGS.
Healthy stock, well rooted, ready to ship now
Hinze's White..... per 100, $1.25; per 1000, $10.00
Grace Wilder..... " 1.50; " 12.50
W. F. Dreer. " 2.50;
THOMAS DeWITT,
(Successor to DeWitt Bros.) BRISTOL, PA.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

STRONG PLANTS OF CARNATIONS.

Fine stock, ready now. Special prices on large lots. Terms, cash with order.

	Per 100 Rooted Cutting's	Per 100 Strong Plants
Daybreak, flesh pink	$ 3.00	$ 6.00
Tidal Wave, carmine	2.00	4.00
Grace Wilder, bright pink	1.50	4.00
Silver Spray, white	2.00	4.00
Hector, scarlet	2.00	4.00
Buttercup, good yellow	4.00	6.00
Lizzie McGowan, white	2.00	4.00
Crimson Coronet	3.00	6.00
J. J. Harrison, variegated	2.00	4.00
Ferdinand Mangold, crimson	3.00	6.00
Golden Triumph, light yellow	4.00	6.00
Fred Dorner, scarlet	3.00	6.00
Nellie Lewis, variegated	2.00	4.00
Portia, scarlet	1.50	3.00
Ben Hur, clear pink	4.00	6.00
White Dove, pure white	3.00	5.00
Nancy Hanks, clear pink	4.00	6.00
Aurora, bright pink	3.00	6.00
Prest. Garfield, scarlet	1.50	4.00
Emily Pierson, scarlet	4.00	6.00
Peachblow Coronet, blotched	3.00	5.00
Puritan, white	3.00	5.00
Wm. Scott, clear pink	10.00	15.00
Mad. Albertini, light pink	10.00	15.00
Mrs. E. Reynolds, bright pink	10.00	15.00
Richmond, brilliant carmine	10.00	15.00
Blanche, white	10.00	15.00
Edna Craig, clear pink	12.00	15.00
New Jersey, scarlet	12.00	15.00
Ida McKinley, salmon pink	10.00	12.00

GEORGE HANCOCK, Grand Haven, Mich

CARNATIONS
ROOTED CUTTINGS.
Puritan, Aurora, Golden Triumph, Grace Darling, Daybreak, Pearl, White Wings, Lizzie McGowan, Louise Porsch, W. F. Dreer, J. R. Freeman,
and many other varieties; fine, healthy stock, ready January and after.

HYBRID PERPETUAL ROSES
500 Paul Neyron, strong plants... $40.00 per 100.
20 other leading varieties ... 10.00 per 100.
$80.00 per 1,000.
Send for price list.

WOOD BROTHERS,
Fishkill, N. Y.

W. R. SHELMIRE,
Carnation Grower
AVONDALE, CHESTER CO., PA.

Send for price list of Rooted Cuttings.

CARNATIONS
ROOTED CUTTINGS
of all the leading varieties. Will be ready January 1, 1893.
R. T. LOMBARD, Wayland, Mass.

GRACE BATTLES
and over 60 other varieties of
CARNATIONS
offered the Wholesale Trade.
My list embraces the best Standard and New kinds, including some of particular interest to growers of seedlings. Correspondence and personal inspection solicited.
C. J. PENNOCK,
The Pines, Kennett Square, Chester Co., Pa.

NOTICE OF REMOVAL

BOSTON, April 24th, 1893.

Geo. Mullen

Wants his patrons and the trade in general to know that he has removed from 17 CHAPMAN PLACE

TO

NO. 7 PARK STREET.

In consequence of greatly increased facilities for doing business he will carry beside his usual line of first class

FRESH CUT FLOWERS

AND

FLORISTS' SUPPLIES

Plants of All Kinds in Season.

Patrons will find our prices as low for first-class goods as can be found in the city, and with a more central location than we had before and other vital improvements, we trust to secure many new customers at the

DAYLIGHT STORE,

Long Distance Tel. Call, "BOSTON 316."

7 Park St., BOSTON, MASS.

St. Louis.

The past week has been marked by quite a sharp advance in cut flower trade; the increase looked for after Easter arrived, assisted no doubt in a great measure by the cooler weather that is prevailing; quite a number of receptions and weddings have occurred to keep things moving. The plant trade on the contrary has fallen off, and is running steadily behind the corresponding time last year. The drop was most noted immediately following a heavy rain storm which prevailed over a large section of the southwestern states early in the week. The storm was followed by cooler weather, thus checking orders from being sent. The storm here was accompanied by heavy hail; luckily however it missed the city and occurred in a district devoid of any greenhouses.

Parties coming in on local trains report trees and shrubbery badly damaged.

The show of plants at the union market is very good, the most taking plant being the hydrangea. The C. Young & Sons Co. have just at present a house of hydrangeas that far surpass anything ever seen here before. A portion of the plants were treated according to the most approved methods for making them come blue, but the color has failed to show up; a few did come a good blue but they promptly died after so doing, presumably of the "blues." It is the opinion of all who have examined them closely, that those treated in order to change their color have come a brighter and better pink than those grown naturally.

Thos. Carroll, of St. Louis Co., has a fine show of lilies. He finds however that at this season they are a little slow, in fact he has found all through the season that at present bulbs are not "in it." He has been troubled somewhat the past season with his heating apparatus and expects during the coming summer to change his entire plant to steam. He also expects to add another house, and will devote all his glass to carnations, smilax and ferns, finding as all of us do, the great advantage of growing specialties, as compared with general stock.

On Tuesday, the 25th, Mr. Eugene H. Michel, the popular and energetic secretary of the Michel Plant and Bulb Co. was married to Miss Julia Ehrmann. His many acquaintances in the trade were somewhat surprised, as he kept matters very quiet, but all unite in wishing him joy in his new relation. R. F. T.

Association "Flora"

BOSKOOP, HOLLAND.

Now on hand in New York:
CLEMATIS, 3 Years, per 100, $30.00
H. P. ROSES, for forcing, " 9.00
In the best variety, as Alfred Colomb, Anna de Diesbach, B. Rothschild, Fisher Holmes, Gen. Jack, La France, Mme. G. Luizet, Mme. Plantier, Magna Charta, Paul Neyron, P. C. de Rohan, Merville de Lyon, Perle des Blanches, Ulrich Brunner and other sorts. Azaleas, Rhododendrons, Spiræas, etc. We also have Palms, Dracænas, Araucarias and Bay Trees at our nurseries in Holland. Catalogue on application.

P. OUWERKERK, 206 Cambridge Ave.,
JERSEY CITY, N. J.

MAGNOLIAS

OBOVATA GRACILIS AND PURPUREA.

Fine, bushy plants, 3 to 8 feet, from $25.00 to $200.00 per 100.
Send for descriptive catalogue and wholesale price list free to all in the trade.

SAMUEL C. MOON,
MORRISVILLE, Bucks Co., PA.

Please mention the AMERICAN FLORIST every time you write to an advertiser.

The three leading Florist Flowers:

CHRYSANTHEMUMS, CARNATIONS AND ROSES.

ALL THE NEW AND SELECTED STANDARD VARIETIES. . . .

My stock of all are as fine as can be produced at reasonable rates.
Complete list of these will be mailed to all applicants in the trade.

JOHN N. MAY, Summit, N. J.
Mention American Florist.

CHRYSANTHEMUMS.

NOVELTIES AND STANDARD VARIETIES.

Lowest price on application.

NATHAN SMITH & SON,
167 W. Maumee Street, ADRIAN, MICH.

Established Orchids.

CATTLEYA TRIANÆ, fine selected stock, well established in 6 inch pots, and will produce four to eight flowers each next winter. Many of them are very choice varieties. Single plants, $2.50, twelve for $25, one hundred for $175. CATT. GASKELLIANA, extra well furnished plants in fine condition, and will produce in June next 6 to 10 flowers each. Single plants, $2.50, twelve for $25. CATT. MOSSIÆ, the finest cattleya for color and size yet introduced. Splendid plants, well furnished with flower sheaths and will produce 6 to 10 flowers each plant in May. $3 each or $30 per dozen. A large consignment of EAST INDIAN ORCHIDS will shortly arrive. Among them will be a grand lot of Cypripedium Insigne, collected in the original district from which all the choicest varieties have come. Also Dendrobium Nobile, Dendrobium Farmerii, Dendrobium Chrysotoxum, Dendrobium Thyrsiflorum, Dendrobium Aureum, Dendrobium Densiflorum, Dendrobium Devonianum, Dendrobium Cambridgeanum and other choice species. Particulars later.

IG. FORSTERMAN, NEWTOWN, N. Y.

Rooted Cuttings of Evergreens, Hardy Flowering Shrubs and Hardy Perennials (Achiliea, iberis, etc.) raised on contract for spring delivery. SEND LIST OF WANTS.
. . . ISAAC C. ROGERS, MOORESTOWN, N. J.

COLEUS.

Golden Bedders and Verschaffelti all sold. Can still supply mixed lots, my selection, $6.50 per 1,000, 90 cts. per 100. But get your order in quick.

ALEX. McBRIDE, Alplaus, N. Y.

DO YOU WANT ANY?

	Per 100.	Per 1000.
Ivies English, one year old	$5 00	$40 00
Alternanthera, red or yellow	3 00	25 00
Echeveria Glauca, 2-2½-inch diam.	3 00	25 00
Daisies, hardy red or white	3 00	25 00
Pansies, strong plants, good strain	3 00	25 00
Coleus, rooted Golden bedder and Verschaffeltii	1 00	7 50

Sweet Pea seed, our own growing, finest varieties mixed 65c. per pound. (Cash must accompany all orders.)

JOHN RECK, Bridgeport, Conn.

AQUATIC NOVELTIES FOR 1893.

See our illustrated catalogue containing handsome lithograph of new Pink Pond Lily (Nymphæa Odorata Caroliniana), one of the choicest in cultivation. A complete collection of all the hardy and tropical varieties in cultivation. Catalogue and prices free on application.

WM. TRICKER, Dongan Hills, S. I., N. Y.

Cyclamens.

	Doz.	Hundred.
Select strains, in 3½-in pots	$1.00	$8.00
H. P. Roses. Select named kinds	1.50	10.00
Smilax, stocky, well-hardened Seedlings, per thousand,	6.00	.75

F. A. BALLER,
BLOOMINGTON, ILL.

"CHRYS-COLA"

ROOTED COLEUS

Verschaffeltii, J. Goode, Golden Verschaffeltii, Yeddo, Firebrand, Chicago Bedder, Chapmani.

75c. per 100, $6.00 per 1000.

Cash with order.

S. B. FIELD, Roselle, N. J.

E. G. HILL & CO.,

Wholesale Florists,

RICHMOND, INDIANA.

VERBENAS, $20.00 per 1,000. 2.50 per 100.
Alternantheras $25.00 per 1,000; $3.00 per 100.
Coleus, Centauria, Alyssum, $2.50 per 100.
Pelargonium, F. Dorner, fine stock, $10.00 per 100.
Roses, fine stock leading forcing varieties.

JOSEPH HEINL, Jacksonville, Ill.
Mention American Florist

SURPLUS STOCK. *Per 100*

Alternanthera, 3 varieties, ($25.00 per 1,000)	$ 3.00
Achania Malvaviscus	5.00
Agathea Cœlestis	2.50
Ageratum, blue and white	3.00
Alyssum, 3 varieties ($25.00 per 1,000)	3.00
Aloysia Citriodora	5.00
Balm, variegated	3.00
Begonias, Vernon and Listrl or Diadem	4.00
Begonias, Gloire de Lucerne and M. DeLesseps	6.00
Begonias, Argenten Guttata and Metallica	3.00
Caunas, named, our selection	5.00
Cuphea	2.50
Centaurea Gymnocarpa	3.00
Carnations, Golden Gate, Mrs. Fischer, Lizzie McGowan	4.00
Chenostoma Hispida	3.00
Chrysanthemums, leading varieties	3.00
Coleus ($25.00 per 1,000)	3.00
Dahlias, large roots	8.00
Feverfew	4.00
Echeveria Metallica and Hoveyii	16.00
Echeveria, Secunda Glauca	2.50 and 3.50
Forget Me Not	3.00
Ficus Elastica, $5.00 per dozen.	
Fuchsias, E. G. Hill and Phenomenal	5.00
Fuchsias, in variety, our selection	3.00
Geraniums, Mme. Sallerol	3.00
Geraniums, Happy Thought, Mt. Snow	4.00
Geraniums, Ivy Leaved	3.00
Gieborna Helerracea, var	4.00
Heliotrope, 2 varieties	4.00
Hoya Carnosa, 3½-inch	8.00
Hoya Carnosa, variegated	15.00
Hydrangeas, Red Branched, Thos. Hogg, Otaksa	4.00
Impatiens Mariana and Sultanii	4.00
Ipomœa Moonflower, white and blue	4.00
Ivy, German	3.00
Loonoots Leonurus	4.00
Lobelia, blue	3.00
Manettia Vine	3.00
Marguerite, Daisy, white	4.00
Marguerite Daisy, single, yellow, $1.00 per dozen.	
Oxalis, pink	3.00
Pelargoniums, in variety	5.00
Passiflora, Constance Elliott	4.00
Passiflora, golden spotted (John Spaulding)	5.00
Mexican Primrose (1,000 for $25.00)	3.00
Pilea Reptans	3.00
Pilogyne Sauvis	4.00
Ruellia Formosa	4.00
Salvias	4.00
Smilax	3.00
Streptosolen Jamesonii	4.00
Tropeolum, Cardinal Prince	5.00
Verbenas, healthy stock	3.00

I. N. KRAMER & SON,
CEDAR RAPIDS AND MARION, IA.

FLORISTS' HOSE

Made by E. W. Holt, member of the Society of American Florists.

Special Offer on Orders until May 15, '93. 15 per cent on the following, 15 per cent.

¾-inch 3 ply Standard, 12 cents per foot.
¾-inch 3 ply XX 15 cents per foot.
4 ply 16 cents per foot.
4 ply XX 20 cents per foot.
½-inch hose 20 per cent less than above price.
1-inch hose 20 per cent more than above prices.
Special—Armored Hose, ¾-inches, 12 and 15 cents net.

GOODYEAR RUBBER CO.
2 W. 14TH ST. NEW YORK.

Tuberous Begonias.

We still have some fine tubers, which to close out we offer at

Single Mixed, per 100, $4.00; **Double Mixed**, per 100, $7.50; **Single Seedlings**, from seed boxes, per 1,000, $15.00; **Single Seedlings**, transplanted, per 1,000, $25.00; **Double Seedlings**, transplanted, per 100, $3.50.

F. J. MEECH & SON,
Charlevoix, Mich.

Grevillea Robusta
OR "AUSTRALIAN SILK OAK."

Splendid plants in two-inch pots, ready to shift. Price **$4 per 100; $35 per 1,000.**

PIKE & ELLSWORTH,
JESSAMINE, FLORIDA.

AMPELOPSIS VEITCHII.

3½-inch pots, $6.00 per 100.
5-inch, $9.00 per 100.
CHRYSANTHEMUMS.
2½-inch, $4.00 per 100.
Address **J. G. Burrow,**
FISHKILL, N. Y.

Mention the American Florist when writing to advertisers on this page.

How Are You, Snow Crest?

CUT BLOOMS 50 CENTS PER HUNDRED.

Well, they say we are the best,
For all who see us like us,
And so far we've stood every test
Or otherwise they'd hike us.
We will come your plant to grace
For seventy cents per dozen
Send order now to Gibson's place.
We'll come next day a buzzin'.

50,000 now ready strong rooted cuttings, $2.00 per 100. Full budded and blooming for immediate sales and bedding out. Strong and stocky, $4.00 per 100; $35.00 per 1,000; 500 at 1,000 rates.

Florists double white forcing petunias, small plants, $3.00 per 100.

Gibson's hybrid pansy, small plants 50c per dozen.

Golden Marguerites, Gem Feverfew, Lobelia, trailing and dwarf, and mixed vase and bedding plants, rooted, $1.00 small plants, $2.00 per 100. Vincas from flats $2.00 per 100. Eulalia, China and Japonica 4 inch size, $3.00. 5 and 6 $5.00 per 100. Satisfaction guaranteed or money refunded.

Address, cash with order please

J. C. GIBSON, Woodbury, N. J.

20,000 VERBENAS.
THE CHOICEST VARIETIES IN CULTIVATION.

Fine pot plants, $2.50 per 100; $20 00 per 1000.

NO RUST OR MILDEW.

Packed light, and satisfaction guaranteed. Send for circular. . . .

Our sales reached nearly 250,000 last year, and we can assure our customers that our plants are fully equal, and assortment of varieties surpass those of last year.

J. L. DILLON, Bloomsburg, Pa.

ROSES AND CARNATIONS.
The Largest and Finest Stock in the Northwest ever offered at the following prices:

ROSES—Perles, Hoste, Sunset, La France, Mermet, Bride, C. Soupert, Niphetos, from 2½-inch pots, $4.00 per 100
Mme. Watteville, Albany, Pierre Guillot, Meteor, from 2½-inch pots 5.00 per 100
American Beauty, from 2½-inch pots 7.00 per 100

CARNATIONS—Silver Spray, Lizzie McGowan, Hinze's White, Hector, Portia, Garfield, Grace Wilder, Fred. Creighton, Mrs. E. G. Hill, from 2-inch pots 3.00 per 100
Rooted Cuttings of all varieties offered 2.00 per 100

Cut Flowers, Roses, Carnations Lilium Harrisii and Smilax at lowest market prices. Telegraph orders promptly attended to. CHRIST HANSEN, Wholesale Florist ST. PAUL, MINN.

STOTT'S DISTRIBUTOR

Read Advertisement in next week's issue.

Mention the American Florist when writing to advertisers on this page.

THE PERFECT DRAINAGE
BENCH TILE

For circulars, etc., address
W. P. Wight, Upland Green Houses,
Send your business card. MADISON, N. J.

Always mention the American Florist when writing to advertisers.

Toronto.

S. Tidy & Son are getting well settled down in their new store on King street, and find an increased trade; their window is always tastefully arranged, and the interior of the store makes a generous show of decorative plants. It is the first store of its kind on this fashionable thoroughfare.

When I called on J. H. Dunlop he was working like a bee, superintending the erection of three immense new greenhouses, 240x18, short span to the south. These will be entirely devoted to roses; the glass will all be butted, and the houses finished in the most approved style. Besides the above there will be a house running along the the east side for smilax and Asparagus plumosus. Mr. Dunlop has done so well with Daybreak carnation that he will plant a house with it the coming summer. He is also very well pleased with the rose Bougere; the color is a soft pink, something between a Laing and Mermet—a clean healthy grower, and sells well.

John Cottrell also contemplates building a new carnation house 100x20; he has quite a stock of the better kind of foliage plants, orchids, and a nice selection of palms, and in one house there were about 400 Hydrangea hortensis in bloom; a pretty sight.

Grainger Bros., beside their business in general florist work, issue a catalogue of seeds and plants. They report a good spring business. During the summer they will build a new florist and seed store and office.

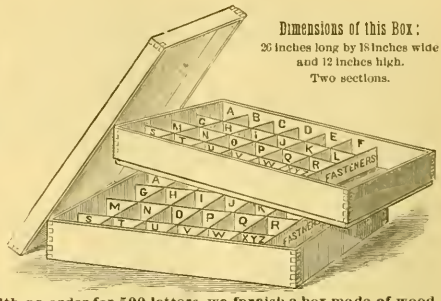
Plumb & Son report a good trade in palms the past winter.

Arthur J. Frost is erecting a lot of new glass a little way out of the city. His stock was in fine condition, including a lot of good cinerarias.

Wm. Jay thinks of erecting a little more glass this summer. He has a nice stock of ferns.

Manton Bros. report a very good trade; they handle a good many trees and shrubs, in addition to general florists' stock. B.

DO YOU WANT an alphabetical list of the chrysanthemums in commerce in America, with class and a brief accurate description of each one, and synonyms noted? You will find such a list in our new trade directory and reference book.



Dimensions of this Box:
26 inches long by 18 inches wide and 12 inches high.
Two sections.

With an order for 500 letters, we furnish a box made of wood, nicely stained and varnished, such as is represented in the cut.

BOSTON FLORIST LETTER CO.

Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1½-in. and 2-in. 2.00 per 100. Patent fastener with each letter.

OUR NEW SCRIPT LETTER, $4.00 per 100.

N. F. McCARTHY, Treas. & Mangr. | Address 13 Green St., Boston, Mass.

Address all correspondence to 1 Music Hall Place.

We have a new FASTENER which we consider a decided success. Any customers having old style fasteners which they wish to exchange, can do so without additional cost by writing us.

AGENTS.

Marschuetz & Co., 25 N. 4th St., Phila., Pa.
A. Roiker & Sons, New York.
F. E. McAllister, 22 Dey St., New York.
A. D. Perry & Co., 33 Warren St, Syracuse, New York.
E. Kauffman, Philadelphia, Pa.
H. Bayersdorfer & Co., Philadelphia, Pa.
A. C. Kendal, 115 Ontario St., Cleveland, O.
J. A. Simmers, Toronto, Ont. Agent for Canada.
E. H. Hunt, 79 Lake St., Chicago, Ill.
Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.
H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O
T. W. Wood & Sons, 6th and Marshall Sts. Richmond, Va.
Jas. Vick's Sons, Rochester, N. Y.
C. A. Kuehn, 1122 Pine St., St. Louis, Mo.
D. B. Long, Buffalo, New York.

These Letters are handled by all the Wholesalers in Boston.

Mention American Florist.

THE "LOCKLAND" Sash Bars

ARE ALWAYS SATISFACTORY.

This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.

GUTTER MATERIAL, RIDGES, SASH, ETC.

The finest CLEAR CYPRESS used.

Write for circulars and estimates. . . .

LOCKLAND LUMBER CO.

. . . . . Lockland, O.

TO TAKE PLACE OF WIND MILLS

HOT AIR PUMPING ENGINES

A Windmill

is unreliable because it depends upon the elements for its power; hydraulic rams also depend upon favorable conditions and waste as much water as they secure. Steam pumps require skill and hand pumps demand labor and time. The

DE LAMATER-RIDER OR DE LAMATER-ERICSSON Hot-Air Pumping Engines

are especially designed for pumping water, and from shallow streams or any kind of well. They are simple, safe and reliable, require no steam and have no valves. They require very little heat to operate them, and can be arranged for any kind of fuel.

Send for illustrated catalogue to

THE DE LAMATER IRON WORKS, 24-26 Cortlandt Street, NEW YORK, N. Y.

WHERE? OH WHERE?

Can I get GOOD Hardy Ferns this spring and for Memorial Day?

Well, we know of but one place and that is at

H. E. HARTFORD'S,

Also Bouquet Green, Laurel Festooning, Decorative Goods, etc., etc.

18 CHAPMAN PLACE, BOSTON.

GOODYEAR RUBBER CO.

ALL KINDS RUBBER GOODS.

We make a SPECIALTY in GARDEN HOSE, in both Rubber and Cotton.

A GREAT VARIETY OF HOSE REELS, SPRAY PIPES, SPRINKLERS, ETC.

141 Lake Street, CHICAGO.

Mention American Florist.

THE SHORT SPAN TO THE SOUTH

ILLUSTRATED.

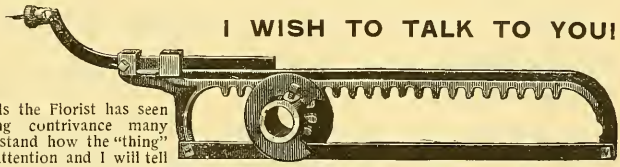
All that is PRACTICALLY known of this will be found in the book on

.. HOW TO GROW CUT FLOWERS ..

By M. A. HUNT, Terre Haute, Ind.

Sent to any address upon receipt of $2.00.

STOP A MINUTE



I WISH TO TALK TO YOU!

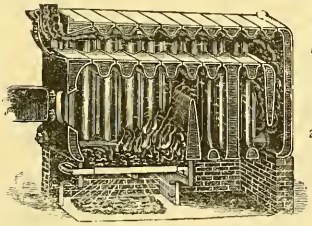
EVERY FLORIST that reads the Florist has seen this "Meat-Saw" looking contrivance many times. But how many understand how the "thing" works? Just give me your attention and I will tell you. The Cog-Wheel in the center is slipped on the Shaft. The small end of the Cogged Lever is attached to the Sash, the Cog Wheel is fastened to the Shaft by means of the Set Screw. When the Shaft is turned the Cog Wheel turns with it and pushes the Cogged Lever and Sash above forward and back at will of the operator. Can anything be more simple? Because it is simple it is CHEAP.

One crank power placed at the END of a 100-foot green-house will lift every sash to the same height as there is no twist in the shafting.

Single strength one-inch pipe only is used. The Cost of fitting up a hundred feet of green-house is from **$10** to **$25**, according to the number of sash to lift.

SEND FOR DESCRIPTIVE CATALOGUE. **J. D. CARMODY, Evansville, Ind.**

THIS IS THE.....



American Champion Water Heater

FOR GREENHOUSE HEATING BY HOT WATER SYSTEM.

It is made by a Florist especially for Florists' use. It can be enlarged at any time more heat is needed, and it burns soft coal without clogging.

SEND FOR DESCRIPTIVE CATALOGUE.

J. D. CARMODY, Evansville, Ind.

CUTS!

Wood Engraving,
Zinc Etching,
Half-Tone,
Wax Engraving, Photo-Engraving,
Designing.

MANZ & CO., ENGRAVERS.
183 Monroe Street, CHICAGO.

STANDARD HOSE MENDER.

The only Mender using ordinary galvanized wire No. 14, instead of expensive bands. Any person can handle it with perfect ease. Thousands in use and all testify to its Wonderful Merits.

Sample Box, by Mail, 50 cts.

E. HIPPARD, Youngstown, Ohio.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

YOU CAN SAVE MONEY BY PURCHASING, AND GLASS BY USING

HAMILTON'S PATENT SASH LIFTER.

"It works like a charm." So say those who use it. Send us 50 cents for one sample and you will say so too.

BAY STATE HARDWARE CO.
272 Freeport Street, BOSTON, MASS.

Mention American Florist.

New Hardy Russian Violets.

Rooted Runners, at $2 per 100 by mail; 500 by express, $8.00. Cash with order.

A. & G. ROSBACH,
PEMBERTON, N. J.

Cleveland.

The local spring trade in flowers has been excellent. The Easter custom exceeded that of any previous year. This was especially true of church decorations, a branch of the business which has at last passed almost wholly into the hands of the florists.

There is plenty of wholesome competition here and prices are consequently kept on a reasonable scale. To see the number of florists' signs that adorn the central part of the city, a stranger would certainly imagine that the business here was being done to death, but they all bloom right along despite the lively competition.

The famous Gordon greenhouses have been placed in charge of the dead millionaire's grandson. The young man is understood to have a taste for this sort of work, and he most assuredly has the very best advantage to encourage its highest development.

Some notable weddings here of late have brought out considerable decorative talent, and taxed the resources of our florists to the utmost notch. In this line Cleveland is rapidly assuming metropolitan customs, and no wedding festivity is considered complete without the professional florist's handiwork in church and home.

April here has been smiling and treacherous—with a good deal more treachery than smiles. Business has consequently lagged more or less, but it will certainly improve when the chill is out of the air.

C. E.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

Clear Cypress, from bottom gutter up is my specialty.

Lyman Felheim, ERIE, PA.

J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS •

Greenhouse Material,

LOUISVILLE, KY.

Please mention the American Florist every time you write any of the advertisers on this page.

"Standard" Flower Pots.

As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address

The Whilldin Pottery Company,

BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.

Every u er of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.

A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.

We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.

SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY,

Manufacturing the

ELVERSON, SHERWOOD & BARKER

STANDARD FLOWER POTS.

Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bud Pots, etc.

ADDRESS PITTSBURGH CLAY MF'G CO., New Brighton, Pa.

H. M. HOOKER COMPANY,

57 and 59 W. Randolph Street, CHICAGO,

NATURAL GAS MADE GLASS

FOR GREENHOUSES.

Write for latest prices.

ESTABLISHED 1866.

FLORISTS WIRE DESIGNS

MANUFACTURED BY

N. STEFFENS

335 EAST 21ST ST. NEW YORK.

GLASS

which is absolutely perfect for modern greenhouse construction.

ROCK BOTTOM PRICES.

Send for Estimate. Satisfaction Guaranteed

REED GLASS CO.

65 WARREN STREET and 46, 48, & 50 COLLEGE PLACE,

—NEW YORK CITY.—

THE BEST POTS.
THE CHEAPEST.
THE LOWEST FREIGHT RATES.
THE BEST OF PACKING.
THE LARGEST POTTERY IN THE STATE FOR MAKING STANDARD FLOWER POTS.

PRICE LIST OF POTS.

	Per 100		Per 100
2 inch	$3.25	6 inch	$2.20
2¼ "	3.50	7 "	3.50
2½ "	4.00	8 "	5.00
3 "	5.00	9 "	7.50
3½ "	7.25	10 "	10.00
4 "	9.00	11 "	15.00
5 "	13.80	12 "	20.00

Terms: Cash, free on board cars here. Address

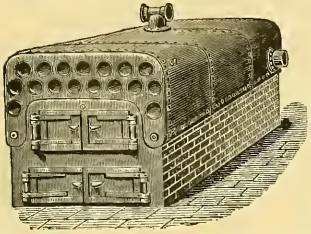
HILFINGER BROS., Potters.
FORT EDWARD, N. Y.

ESTABLISHED 1854.

DEVINE'S BOILER WORKS.

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers



Capacity from 350 to 10,000 feet of four-inch pipe. SEND FOR NEW LIST.

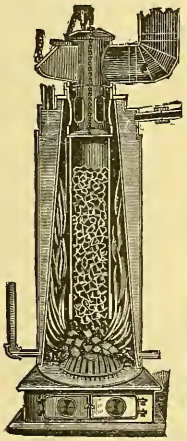
FRANK DAN BLISH, Att'y,

OFFICE, 189 STATE STREET.

WORKS, 56th & WALLACE STREETS.

CHICAGO.

Mention American Florist.



THE WILKS HEATER, FOR HEATING GREENHOUSES, STORES, DWELLINGS, ETC.

Manufactured by THE S. WILKS MF'G CO. 123 S. Clinton St., CHICAGO, ILL.

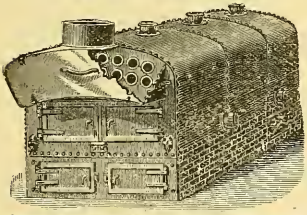
SEND FOR CATALOGUE.

KROESCHELL BROS.

IMPROVED

Greenhouse Boiler,

41 to 55 Erie St., CHICAGO.



Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around front, sides and back). Write for information.

FLORAL DESIGNS

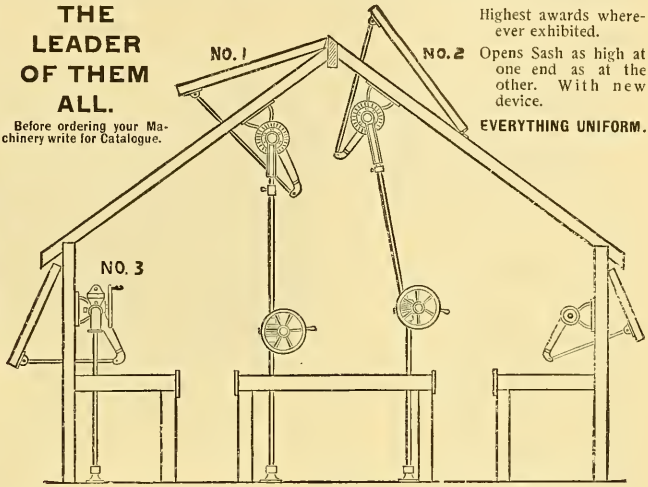
The Cut Flower Worker's friend. Fine book of 160 pages. Send $3.50 for it, to

J. HORACE McFARLAND, Harrisburg, Pa.

STANDARD VENTILATING MACHINERY,

THE LEADER OF THEM ALL.

Before ordering your Machinery write for Catalogue.



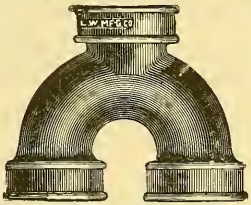
Highest awards wherever exhibited.

Opens Sash as high at one end as at the other. With new device.

EVERYTHING UNIFORM.

E. HIPPARD, YOUNGSTOWN, OHIO.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

L. WOLFF MFG. CO., 93 to 117 W. Lake Street, CHICAGO.

WRITE FOR ILLUSTRATED CIRCULAR.

Pat. 1882, '85, '86, '88, '90, '91.

FOR WATER, AIR, STEAM, ACIDS, OILS, LIQUORS, GAS, SUCTION,

And for any and every purpose for which a hose can be applied.

Sizes, ¼-inch to 42 inches diameter.

The making, vending or use of any Serviceable Armored Wire Bound Hose not of our manufacture is an infringement on one or more of our Patents. The rights secured to us render each individual dealer or user responsible for such unlawful use with all the consequences thereof. For prices and discounts address WATERBURY RUBBER CO., Sole Mf'rs and Owners of all the *Sphincter Grip Armored Hose Patents*, 49 Warren Street, New York.

J. C. VAUGHAN, Agent, CHICAGO.

"An invaluable weeding implement; once used; always used."

Breen's Patent Finger Spade

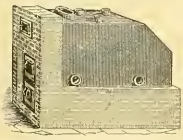
for weeding is conceded by competent authorities to be the best and most useful weeding implement extant. Worn with or without a glove, on either or both the fore and middle finger, weeding, etc. can be done much more expeditiously and better than with any other weeder.

RETAILS AT 10C EACH.

Wholesale, $7.00 per gross or 70c per dozen, delivered in any part of the U. S. or Canada. Half gross orders at gross rates, larger quantities at a reduction.

For circulars and further particulars, address the manufacturer, T. W. BREEN, 625 Mission St. Postal address P. O. box 2118, San Francisco, Cal.

Mention American Florist.



GREEN-HOUSE HEATING.

MYERS & CO.

1518 & 1520 S. 9th St., PHILADELPHIA.

Send for catalogue and price list.

U. S. AND FOREIGN **PATENTS** Trade Marks, Designs, Opinions, Searches, &c., promptly attended to. Send sketch or model for free examination as to patentability. All work strictly confidential.

GEO. H. CHANDLEE, Atlantic Building, WASHINGTON D. C.

Index to Advertisers.

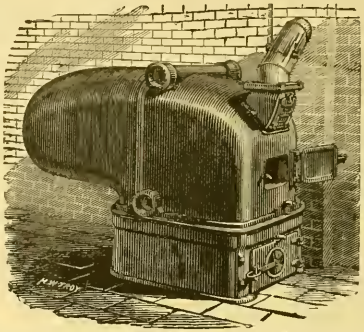
Adv. Rates, etc 1036
Anchorage Rose Co. .
..... 1034 1035
Asmus Ernst.....1033 1035
Baird Chas A 1039
Baller F A 1042
Barnard W W & Co...1039
Bay State Hdw Co....1045
Bayersdorfer H & Co .1036
Berger H H & Co.....1038
Bonsall Jos E & Son ..1035
Bos John Barth 1038
Boston Letter Co . . .1044
Brackenridge & Co....1039
Brauer & Richter.....1034
Breen Thomas W.....1047
Brotherton W A & Co.1034
Brown R S & Son.....1034
Burns & Raynor.....1035
Burrow J G 1043
Burton John.....1034 1035
Carman R W.... 1034
Carmody J D.....1045
Chandlee Geo F 1047
Coles W W 1035
Cook John.....1035
Corbrey T J & Co.1036 1037
De Lamater Iron Wks1044
Devine's Boiler Wks..1047
De Witt Thomas 1040
Dillon J L.....1043
Dreer H A.....1040
Elliott W H.....1036
Ellison Wm.....1036
Engle W J 1034
Fairfield C F 1034
Faust H G & Co 1038
Felheim Lyman.....1040
Felthousen J E.....1040
Field S B.....1042
Forstermann I.....1042
Freeman Lizzie.....1034
Gibson J C.....1043
Gonzalez & Co.....1034
Goodyear Rubber Co .
..... 1043 1044
Hall Ass'n.....1033
Hammond Benj.....1039
Hancock Geo 1040
Hansen Christ 1043
Hart James.....1037
Hart Michael A ...1037
Hartford H E.....1044
Helm Jos.....1042
Henderson John Co...1035
Herendeen Mfg Co....1048
Herr Albert M.....1040
Hews A H & Co 1046
Hilfinger Bros.....1046
Hill E G & Co.. 1042
Hippard E 1045 1047
Hitchings & Co.....1048
Hooker H M Co. 1046
Horan Edw C. 1037
Horan James.....1037
Houston R J. 1033
Hulsebosch Bros 1038
Hunt E H.... 1035
Hunt M A.....1045
Hunter & Purdy 1037
Jennings E B 1034
Kaufmann Ernst & Co1036
Kemble Floral Co 1034
Kennicott Bros.... . 1037
Koffman E 1036
Kramer I N & Son....1048
Kroeschell Bros 1047
Kuehn C A.....1036
La Roche & Stahl.....1036
Lockland Lumber Co..1040
Lombard R T 1040
Long Dan'l B.....1037
Lonsdale Edwin. 1034
McBride Alex.....1042
McCarthy N F & Co...
.....1034 1037
McCrea & Cole 1034
McFarland J H.....1047
McFarland J H Co....1034
McGowan John. 1040
Manz J & Co.....1045
Marschuetz & Co.....1036
May John N.....1042
Meech F J & Son 1043
Meyer John C & Co. .1034
Michel Plant & Bulb
Co 1039
Millang Bros.....1037
Moffatt G J.....1039
Moninger Jno C 1048
Moon Samuel C.....1042
Moon Wm H Co.....1040
Moore Frank L.....1035
Mullen Geo 1037 1041
Myers C C 1047
Nanz & Neuner.....1035
National Plant Co.....1034
Nielson Hans 1034
Niles Centre Floral Co1037
Olson M.....1037
Ouwerkerk P.....1042
Peck & Sutherland.....1037
Pennock C J.....1040
Pennock Sam'l S 1036
Pickelman S.... 1039
Pierson F R Co.....1038
Pike & Ellsworth 1043
Pittsburg Clay Mfg Co1046
Prince A G & Co.....1037
Randall A L.....1037
Reck John 1042
Reed Glass Co.....1046
Reiss & Brady.....1038
Renard Joseph.....1040
Rimbaud Benj.....1038
Roberts D H.....1039
Roehrs Theo.....1037
Rogers Nineties.....1042
Rolker A & Sons.....1036
Rosbach A & G.....1045
Rosenfield F J.....1034
Russell S J.....1037
Sander & Co.. 1039
Schulz Jacob.....1035
Segers Bros.....1039
Segers A Co 1038
Shelmire W R.....1040
Sheridan W F.....1037
Siebrecht & Wadley...1032
Simons R E.....1033
Siple Doppel & Co....1046
Situations, wants.....1035
Smith C A Floral Co..1035
Smith Nathan & Son..1042
Smith & Webster.....1048
Spooner Wm H. 1035
Steffens N.....1046
Stott Garden Imp Co..1043
Strauss C & Co 1035
Struck J N & Bro.....1046
Styer J J 1040
Sunderbruch H L.....1037
Tilton Bros 1034
Trieker Wm.....1042
Tupper C O 1033
Vander Schoot R & Son. 1038
Van Waveren & Kruyff... 1038
Vaughan J C.... 1040
Waterbury Rubber Co1047
Weatherede Sons T W1048
Weeber & Don.....1038
Welch Bros 1033 1037
Whildin Pot Co.....1046
Wight W P.....1043
Wilks S Mfg Co.....1047
Winter N D.....1033
Wisconsin Flower Ex.1036
Wolff L Mfg Co.....1047
Wood Bros.....1040
Yoshikke H.....1039

You will benefit the American Florist by mentioning it every time you an advertiser in these columns.

Goodell H H
Mass Agri Col
15 Dec 93

GREENHOUSE HEATING AND VENTILATING

Horticultural Architecture and Building.



HITCHINGS & CO.

Established 1844.

233 Mercer St., New York.

FIVE PATTERNS OF BOILERS.

NINTEEN SIZES.

Perfect Sash Raising Apparatus.

Rosehouses, Greenhouses, Etc., of Iron Frame Construction, Erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frame Benches with the "Perfect Drainage Bench Tile" or Slate Top.

SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUE.

WEATHERED'S DOUBLE DOME BOILERS

Are the Very Best.

OUR

Patent Rocking

AND

Shaking

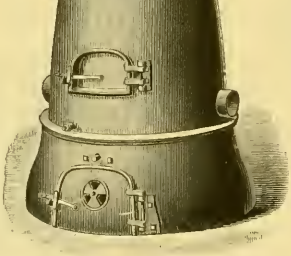
Grates

ARE

ABSOLUTELY PERFECT,

Being in the smallest sections are the least costly to keep in repair.

Send 3 Cents Postage for CATALOGUE and please mention this paper.



Proven by 40 years USE

Effective and Durable.

PATENT

Sash Raising Apparatus.

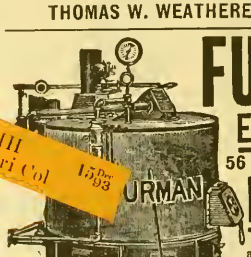
ROSE HOUSES, GREEN HOUSES, ETC.

of Iron Frame Construction, erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frame Benches with Drainage Bench, Tile or Slate.

THOMAS W. WEATHERED'S SONS, (Incorporated) 244 CANAL ST., N. Y.

FURMAN BOILERS



Economical — Substantial — Safe.

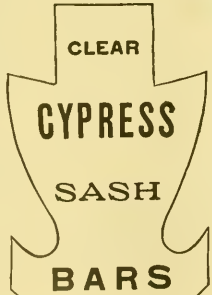
56 STYLES AND SIZES—BURNS HARD OR SOFT COAL.

Modern Hot-Water Heating

These Boilers have a high reputation for Staunchness, Durability and Safety, and are GREAT COAL SAVERS. Minimum Friction and Maximum Velocity only obtained by VERTICAL WATER CIRCULATION. Send for new 150-page book giving full particulars and a great deal of valuable information on modern Heating and Ventilation, with plans and tables for correct hot-water work. Mailed free.

Address HERENDEEN MFG. CO., 26 Vine Street, GENEVA, N. Y.

CYPRESS GREEN HOUSE MATERIAL



HOT BED AND VENTILATING SASH

JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

SMITH & WEBSTER,

MAKERS OF

GREENHOUSE PIPE

FOR HOT WATER AND STEAM,

193 Lake Street, - CHICAGO, ILL.

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

Always mention the AMERCAN FLORIST when writing to advertisers.

THE AMERICAN FLORIST

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, MAY 11, 1893.** **No. 258**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company. Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,

322 Dearborn Street, CHICAGO.
Eastern Office: 67 Bromfield St., Boston.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass., secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis, Mo., August 9 to 12, 1893.

CONTENTS.

Chrysanthemums—prepare for the exhibitions. 1049
Succession of crops 1050
Group of odontoglossums (illus) 1051
Carnations—seasonable hints 1052
—Chester County Carnation Society 1052
Grafting 1052
The World's Fair 1052
Flower festival at Santa Barbara (illus) 1053
The flower market of to-day 1053
Miscellaneous seasonable hints 1054
New York 1054
Boston 1055
Philadelphia 1055
Chicago 1055
Buffalo 1056
Washington 1056
Exhibition New York Florists' Club 1056
The seed trade 1062
News notes 1062
St. Louis 1064
Spring humor 1066
Low retail prices 1068
Baltimore 1070
Patents recently granted 1070

Denver.

The regular meetings of the club are attended well by active members. Saturday evening an essay on hardy roses by John Berry, gardener for Senator Wolcott, was the leading paper. Mr. Berry enjoys the rose supremely and has for years proven himself a thorough master of its culture. He having had more years of experience than most of us in its culture in Colorado, the paper was a great help. Wolhurst, the place in care of Mr. Berry, is fast becoming a leading place of the west. His bed of 3,000 Kæmpfer's iris promises to be a beautiful sight when in bloom.

A bunch of K. A. Victoria and Mme. Testout roses exhibited at the club had very many admirers.

Gus Rolin has been elected mayor of Harmon.

The club adjourned for two weeks, then to celebrate our first smoker, with our president, H. H. Given. LYLE.

CANANDAIGUA, N. Y.—A. C. Cappon will build this spring another house 100x20 and a new office building.

Preparing for the Exhibitions.

Growers of chrysanthemums, who are looking forward to capturing the prizes at the exhibitions next fall, should now, if they have not already, be maturing their plans, how and what they are going to grow to win, from the exhibitor who took them into camp last year.

The culture of chrysanthemum blooms in America is widely different from that practiced by the successful growers in England. Here, probably the majority of the flowers staged last fall were grown on plants taken from the cutting bench during May or the early part of June, while in England the cuttings are struck during December, January, or February. Possibly this difference can be accounted for by the excessive heat which we have in summer, making it a very easy task for us to ripen the wood thoroughly during the hot days of August, and thereby obviating to a great extent the study which is made of the culture abroad in what they term "taking the bud," which to them is the critical stage of growth. But the May or June struck cuttings do not usually set but two buds, the true crown, (which is the better bud to save except in some few varieties) and the terminal bud. Messrs. W. & G. Drover and nephew, W. Adams, of Fareham, England, published last year a very thorough treatise upon their manner of growing blooms, and it is doubtful if anybody in this country has handled the subject so systematically, they having made each variety a study in itself. They have been very successful in the shows abroad, and it might be advisable for some of our amateurs to try their way of growing blooms, and see what the result would be in our climate, in comparison with those grown in the manner generally adopted by our growers. It is very doubtful if any of the commercial growers would undertake it, as the expense would be more than double what the cost of production now is.

The blooms to which the first premium (for the best 50) was awarded last fall at the Madison Square Garden, were, I believe, grown on the plan adopted abroad, the grower faithfully following the directions laid down by Mr. Edwin Molyneux in his treatise entitled "Chrysanthemums and their Culture." So perhaps we, who are looking forward to taking prizes, may have to keep our eyes open, or they who have the culture in vogue in England, may carry them away while we are asleep. There is no doubt but that blooms grown on early struck cuttings have more substance, and stand far better than those grown on plants struck after the first of May, and it is the testimony of all who have visited the exhibitions on both sides of the water, that we have not yet mastered the growing of the incurved varieties.

Cuttings put in the bench during the early part of May are very easily rooted if they are kept constantly wet. In making the cuttings do not leave on too many leaves; take off all the larger ones, for if they are retained they are apt to lie on the sand and cause damping off, which is very quickly communicated to the others, and often results in great loss. Another cause of damping off is allowing the bench to get dry and the cuttings to wilt, and then rotting down when they are in that condition. It is far better to throw a paper over them until they recover, and then water, which will very often cure them, but the better way is to keep them thoroughly wet and not let them wilt at all.

It might at this time be a good plan to look over the varieties introduced during 1892, and see what varieties made a good showing at the different exhibitions last fall. We do not mean to take up all the varieties introduced by the different disseminators, but to take the lists of varieties found in the prize collections and pick out the novelties, and say nothing whatever of those that did not prove fast enough to trot in the first class.

Black Beauty, (Hill & Co.—Monahan).—This variety was advertised in 1891, but was not disseminated until the spring of '92. It certainly is a very valuable addition to the crimson class, and should find a place in all collections. It looked a little weak at first, but gained strength, and this year is showing good growth.

C. B. Whitnall, (Hill & Co.)—A large incurved Japanese variety of good form and of peculiar color. It was found in the 50 class at almost all the shows.

Col. W. B. Smith, (Spaulding)—Another of the incurved Japanese, of a beautiful bronze shade, although with some growers is on an early bud, of a light yellow. This is a valuable bloom for early shows, being in its prime with us last season about Nov. 1.

Dr. Callandreau, (Sievers).—This is a very light yellow incurved Japanese of good size and form, but as we saw it last fall, looked as if it might be light of texture. This was called the best flower on the Pacific Coast.

Edward Hatch, (Hill & Co.—Wood, *Gloriosum* X *Ada Spaulding*)—A very large incurved Japanese of perfect form

and good constitution. Much has been said and written of the color of this variety. We have grown it for two years, and have never failed yet to produce a delicate pink flower, but it inherits from its pollen parent, Ada Spaulding, the fault of producing a yellowish white flower when too early a bud is taken. This variety reaches perfection a little too early for the later shows.

Emma Hitzeroth, (Spaulding).—This is one of the best of the '92 introductions, and the best clear yellow, of immense size and pleasing color. The flower sometimes being a little flat, and a little early for exhibition.

Geo. W. Childs, (Thorpe) —A beautiful velvety crimson, and the most showy of its color, but scorches very easily, and must be shaded from the direct rays of the sun after the flower begins to open.

H. F. Spaulding (Spaulding).—A very good bloom of peculiar shade, described as rich apricot yellow, shading to rose, center petals clear yellow. This flower will always attract attention in a collection because of its coloring. Last season with us the plants had a tendency to come blind.

Harry Balsley, (N. Smith & Son. *Alfred Warne X V. H. Hallock.*)—This variety proved to be one of the best pinks yet introduced, and certainly showed up prominently wherever exhibited. A good grower and of good form.

Harry May, (Pitcher & Manda).—The best bronze up to date. This variety needs no description, for almost everybody knows it, and it should be in every collection, having so many good qualities.

Joseph H. White, (Hill & Co.—Wheeler). —This is a beautiful white, reaching perfection about Nov. 1, and an admirable keeper. The flower is a little flat, belonging to the Japanese, and tending toward the reflex class. This variety also makes a beautiful pot plant.

Mrs. Robert Craig, (Hill & Co.)—This is one of the first incurved varieties of American origin and introduction, and is a valuable addition. It is of large size, good form, and pure white.

Mrs. Jerome Jones, (Vaughan-Gane)—A beautiful white incurved Japanese a little too late for the early shows, but in its prime about November 10. This variety was awarded the Taylor prize in New York for the best variety exhibited having the necessary characteristics for a commercial flower. In growing the bloom should not be cut before it matures, or it will wilt, but if allowed to remain upon the plant until the petals will shake like stiff paper, the flower will stand on the table throughout the show.

Mrs. L. C. Madeira, (Hill & Co.)—This variety probably attracted more attention than any introduction of the year. Another American incurved variety of bright orange yellow, exceeding depth, and good form. It will rank to-day among, if not the best, of the incurved section.

Mrs. E. D. Adams, (Pitcher & Manda) —A very large pure white Japanese variety, a little too early for most shows. In its prime about October 25, and after that date the petals fall away from the center, disclosing a very large eye.

Mr. A. J. Drexel, (Hill & Co.)—This is a great improvement upon any of the varieties of its shade, being a very pleasing crimson lake. A good grower and of fair size.

Mrs. Maria Simpson, (Hill & Co.)—A very handsome chrome yellow incurved Japanese of extra good substance. This variety can be best described as a much improved Eldorado, being of much better constitution than that variety. Awarded first premium in New York for the best introduction of 1892.

Marguerite Jeffords, (Hill & Co.)—A very large incurved Japanese described as bright amber, but belonging among the bronzes as that class is generally interpreted by growers. This variety shows up very well with Harry May, but lacks the depth and substance of that variety.

O. P. Bassett, (Hill & Co.)—A beautiful crimson-scarlet, really an improved Cullingfordii, but must require special culture, as very few of the blooms found a position on the tables last fall.

Olga, (Vaughan-Reiman)—A large compact flower of the incurved Japanese section; soft rose in color, of good constitution, the flowers borne on good stiff stems.

Princess of Chrysanthemums, (Sievers) —This is identical with the variety exhibited last fall and disseminated this spring by Peter Henderson & Co. as "Good Gracious." A most peculiar flower of a delicate lavender shade, the petals twisting, and will probably be seen next fall in most of the large collections.

Roslyn, (Spaulding)—A beautiful rose pink of immense size and of good constitution, the flower a little apt to come out flat, but yet a good acquisition.

Among the reports of the shows last fall we noticed one from Baltimore referring to Mrs. M. J. Thomas as a pink variety, and making an inquiry as to whether it should be pink or white. This variety has always shown a tendency under high culture to produce flowers with streaks of pink or carmine running through the petals; sometimes only one petal will show it, while at other times the whole flower will be affected. The first time this came to our notice was in the fall of 1890, when visiting Mr. John Burton at Chestnut Hill, Philadelphia. In one of his houses we came to a bench of chrysanthemums, and the assemblyman, in his quizzical way, asked us to name the variety, and we immediately gave it up. He told us it was Mrs. M. J. Thomas, and upon being asked the reason of the pink coloring answered it was owing to there being too much iron in the soil. It is very easy to produce flowers of this variety with quite a little color by over feeding with nitrate of soda or sulphate of iron, or mixing a quantity of iron filings in the soil, but the true exhibition bloom of Mrs. M. J. Thomas should be cream white. E. A. W.

Succession of Crops.

Perhaps there is no other problem so difficult of solution to the florist, as the profitable succession of crops. There was a time, and that easily within the memory of the trade of to-day, when one crop was considered all-sufficient from a house for one year. In the fall, on the approach of frost the houses were filled, the fires started, expensive fuel was burned, to keep up a summer heat until the time when spring returned, and then they were emptied, and allowed to remain idle during the best growing season of the year.

But now all is changed, and it is no uncommon thing to hear of three or even four full crops being produced in a single house in one year. Such results can be reached more easily perhaps by those of the trade who are located near large cities, where there is a demand at all times for well-grown plants and flowers, and where the cost of delivering is not a large item in the expense account.

Griffin Brothers, of Frankford, Philadelphia, are among the most successful growers of cut flowers and pot plants for the market in this vicinity. They seem to work their houses to their fullest capacity at all times, having cut flowers, Easter plants, and spring bedding stock, in quantities in their respective seasons, and the quality is always equal to, or above the average. A recent visit found everybody busy. Mr. James, the elder brother, was handling the hose; when asked why he didn't let one of the boys play with the water? he answered:

"When he can do this he knows it all. I do all the watering myself. I believe half the failures come from carelessness in watering."

"We called this morning to get some points from you on succession of crops, or how you manage to get such variety of plants out of your place during the year?"

"All right, come along, and I will try and show you.

"This is our Beauty house, or was until about the latter part of February, when we lifted the plants, cut them back to about three inches, and put in 4-inch pots and placed them under the table in a cold rose house; there they are back on the same table again. They are looking nicely, and will make nice plants for sales this spring. After the Beauties were taken out, we filled the space with hydrangeas from another house; they wanted more room and this house just suited them; we hadn't one left Easter Saturday. Now except the Beauties, the stock here is all young roses."

"Do you grow these?"

"No, we find it cheaper to buy the stock we need than to grow it; we would rather buy good healthy plants in the spring and keep them growing. We will plant with Beauty again about August 1."

"Do you find the Beauty profitable?"

"Yes, it pays us very well; this house is only 50x20, but we had 450 plants in it, and we got a lot of flowers. We cut some flowers every day, but work the house for crops by resting it once in a while. We don't aim for extra long stems; we stop such shoots, and set two to three flowers with medium stems. We think they pay us better."

After passing a propagating house we came to a range opening from a shed.

"These are our first houses; in this house we have Perles on centre bench and bad bouvardia on side benches. We planted it out inside here during summer, but will not do so again; the growth seemed too weak. It made good flowers but not enough of them, and it was hard to keep down the mealy bug. We lifted the plants some time ago to make way for geraniums; cut them back, put in 3-inch pots, and then under the edge of the bench there. We will plant them outside after a while; they make good stock for next season. In all our houses we make a point of keeping the six inches of the table next the walk on either side, for young plants in small pots, to be potted on and fill up vacancies, and we also use this space for starting Easter stock. Under the edges of tables next the walks we also use for a variety of stock plants that we can't afford table space, such as chrysanthemums, etc.

"This bench of geraniums is all Mme. Thibaut, which I think is the best all round pink. For scarlet, La Pilot and Laplace are our two best. We keep our stock plants of geraniums on the little end benches between the side tables and the door, at the shed ends of our houses. We bed the plants in as close together as

GROUP OF ODONTOGLOSSUMS AT MR. F. L. AMES'.

we can in the fall, and get all the cuttings we want during the winter. The old plants are ready to throw out now.

"This house is all geraniums; it was filled with Gontiers until the latter part of February, when they had to go to make room for Easter stock. We put hydrangeas in here then."

"How do you grow hydrangeas?"

"Well, we take cuttings about March 1, put into small pots when rooted, and when established in these, pinch out the ends. They are then shifted into fours and from these to 6-inch. We then put them in an open frame outside, and later on the strongest plants are moved into 8-inch pots. We winter them under the tables of a cold rose house, and bring into heat about the first of the year. We aim to get them for Easter, and regulate the temperature accordingly.

"We grow a few alternanthera for edging, rooting the cuttings in the fall and packing them together closely in boxes, which are kept on a shelf over our stock of geraniums at the end of the house. About February 1 they are potted up, and we soon get all the cuttings we want. Scarlet sage we grow from seed, and then take cuttings from the seedling plants, putting them into 4-inch pots at once when rooted. It is much better than keeping stock plants over.

We grow a lot of Clothilde Soupert in 4-inch pots for spring sales. They come on quickly from strong plants out of 2½-inch pots that we buy early in the spring from the rose growers; we find ready sale for them.

"Here is another rose house, the middle table is all LaFrance; we will keep these in all summer. On the back of the side benches we have a 4-inch shelf for a row of geraniums, or stock plants of different kinds. We grow asters on the side benches, planted out, for summer cutting.

"This is one of our carnation houses; carnations have always done well with us. Mme. Rowland, our new variety, has exceeded our expectations; it has all the good qualities of a perfect carnation, good stem, fine color, does not burst, is above medium in size, and produces with the best of them. We will not send it out until next season. Our principal other varieties are Portia and Hinze's White, which does better than all the other whites with us."

"What is that on the panes of glass you have placed about?"

"That is common bran, and is put there to catch the snails, or rather the bran atttacts them, and about 10 p. m. we come along and make short work of them. We find it a very satisfactory plan. We always have a few Buttercups; these we pot up afterward for spring sales; they sell very well. We shall plant this house after the carnations are done, with Marie Guillot roses on the center bench for summer bloom, and get a good crop of asters from plants set out on the side benches; they make much better flowers than when planted outside.

"On the edges of the benches with the roses and asters we grow variegated periwinkle; this is potted up in the fall, cut back some, and placed along the edge of the walks underneath where it has been growing, and makes fine spring stock.

"On the edges of the carnation tables we start our Easter lilies; they are first put into fours, so as not to take up too much room, and afterwards into sixes; by this time we have moved out some winter crops and made room for them."

A range of houses was now seen that had been filled with roses for cut flowers; some were still doing well and had not been disturbed. In these, as in the others, the borders of the tables were filled with small stock ready to be potted up. The houses in this range are only ten feet wide by 100 long, heated by steam. Roses seem to do very well in these small structures. We noticed that the strips were not fitted their full width at the bottom to the sill or edge of gutter, thus leaving a point from which the drip falls to the ground.

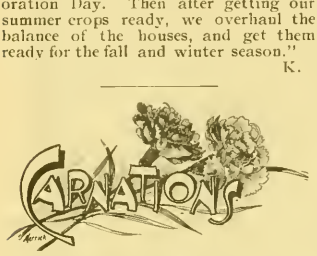
As palms are now considered an essential part of a florist's stock, they have concluded to add them to their list of specialties, and a variety of kentias, arecas and latanias of various sizes have just been purchased, and are temporarily stored in a small house, awaiting the erection of a palm house soon to be commenced.

A number of hybrid roses are grown for spring sales; these are potted in the fall, and stored in a cold rose house on the tables of which they are packed from two to three layers high. When asked if this treatment did not interfere with the growth at the bottom of the plants,

Mr. Griffin said they couldn't see any difference, as before they began to grow they were given more room.

"We always make it a point to keep our benches full. When our Easter stock is delivered, we of course have a lot of room. At this time we take on extra men, and these, with our own force soon pot up all the little plants that have been filling up the edges of the benches and other nooks and corners about the place wherever we could get them. In a few weeks this stock is ready for the market, and is generally all cleaned out by Decoration Day. Then after getting our summer crops ready, we overhaul the balance of the houses, and get them ready for the fall and winter season."

K.



Seasonable Hints.

Plants that have had the requisite care and treatment can be grown through the summer for the production of flowers. Whether it pays to do so is a question each one must decide for himself. But the decision must be made early in the winter. If the houses have been planted with tomatoes it is idle to expect the plants to do very much good under the dense shade of the vines. The starting point then to carry them profitably through the summer must be made in January or February and the houses kept cooler than otherwise would be the case. Plenty of ventilation should be given and the fires may be stopped much sooner than if tomatoes or other tender stuff was growing. If not already done the plants should be overhauled at once—cleaned of dead leaves and branches and some stimulant used in light doses to encourage new growth. As the season advances they should have all the ventilation possible day and night. They will then take a good deal of water and frequent syringings should be resorted to to keep down the heat. We must say, however, that unless the plants look thrifty and pretty free of spider, it will hardly pay to take the trouble with them.

It is often desirable to use some of the plants a second season, as in the case of a new or scarce kind. By proper treatment the old plants can easily be carried over and run a second winter. They will make nearly or quite as good plants as those fresh from the cutting bench. Buttercup is a kind nearly always carried a second season by the growers of this vicinity. The procedure is very simple. As soon as possible after the bloom is off they are taken up and potted in three-inch pots—all the larger growth being cut back. They will soon make good roots and break into a healthy new growth. They are planted in the open ground as soon as the balls will permit. Of course it is not worth while to so treat any of the plants but the healthiest and best. The practice is not advisable only as above stated—young stock always having the preference. We can however, at this writing show plants now in the bench that have seen their third winter, and they are not bad looking plants either. These two-year old plants by fall can hardly be distinguished from the other stock. They are headed in in much the same manner during the season of growth and treated in other respects much in the same way.

Avondale, Pa. W. R. SHELMIRE.

The Chester County Carnation Society.

This society met May 6, at Avondale, Chester Co., Pa. The meeting was called to order by President Ladley at 2 p. m. Most of the members were present as well as quite a number of interested women. After the reading and approval of the minutes, the committee on "Improved methods of heating" (Mr. Davis and Mr. Larkin) reported, giving some very convincing information regarding the burning of coal oil and the practicability of the "Burton burner" for greenhouse heating. Then followed a discussion in which the quality and value of different coals were considered, including interesting information on the subject by Mr. Darlington of Burpee & Co's. seed farm, Doylestown, Pa., Secretary Shelmire and others. Next the committee on a formulated scale for computing the excellence of seedlings, was called upon but failed to respond. Then followed a discussion in regard to the most advisable time for planting out, propagating, etc., with some valuable hints from Wm. Swayne, Secretary Shelmire and others, following which the potting and lifting of plants claimed attention.

A small display of carnation flowers was made, among which were Edward Swayne's Ophelia in her newly won trophy the "Craig Cup;" a tremendous pink from Wilder and Chester Pride, by Lawrence Thompson; a fine picotee yellow from Cæsar by Secretary Shelmire and a novelty by Edward Swayne.

Some interesting remarks followed regarding the growing of gladioli, sweet peas and tomatoes among the carnations, to take the place of them as they become less profitable, a course deemed advisable.

The committee next called on, regarding a local exchange had no present response.

In conclusion the names of Mr. E. D. Darlington and Lewis B. Eastburn were proposed and accepted. Then the meeting adjourned to meet at the usual parlors at Kennett Square the first Saturday in June.

X.

Grafting.

BY JACKSON DAWSON.

From January to March is the best time to graft any of the ordinary hard wooded plants under glass. At that time of the year we can control the temperature better than at any other time. If it is too cold we can fire up, if too warm it is easy to shade or air, so that we can secure an even temperature. In summer when the range of the thermometer is from 60° to 100° it is hard to regulate either greenhouses or frames. A steady temperature of from 50° to 60° is warm enough for grafting any of the ordinary deciduous or evergreen plants.

In grafting under glass good work and good care are necessary if success is to be expected. This is much more easily said than done. The results of a few moments neglect may be most disastrous. A very important part of the work in the first place is the selection and potting of the stock. When it can possibly be done the stock should be potted in April or early May and plunged in a well sheltered border, where they can be occasionally watered if required, so that they may become well established before winter sets in. This is especially required with evergreens, and it would be well to have all stocks well rooted in pots the season before grafting, the success being much more pronounced with plants established than with those not so.

We of course know that many plants such as apple and pear can be and are grafted by hundreds of thousands and heeled in sand and planted out in the following spring, but this will not do with the great mass of species and varieties, although a certain percentage will grow, and the result is much more satisfactory if the plants have been properly prepared before hand. "If a thing is worth doing it is worth doing well."

The next question is what will this or that variety grow on, and what not. We will begin with the pines and spruces. By many this class of plants is considered the hardest of all to propagate by grafting, and many a good propagator in other departments will stumble and shrink from these while he would not hesitate to graft tens of thousands of deciduous plants. I can say that I have had no difficulty whatever in grafting pines, both sections, larch (except pseudolarix which does not seem to stand long on the common larch,) abies, picea, tsuga, chamæcyparis, thuya and others, although of course some species take more readily than others, and some seasons are more favorable than others, but this latter is as true with regard to ordinary forms as to those that are considered so difficult. In this as in almost everything else eternal vigilance is the price of success.

In pines I find that all the five leaved or smooth barked pinuses such as P. cembra, excelsa, Lambertiana, parviflora, Bungeana, and others of this section, grow readily on our white pine, P. Strobus. For the others I have found no difficulty in using the common Scotch pine, P. sylvestris, for a general stock, except in the large needled variety, which I believe does better on P. resinosa, the so-called Norway pine.

In spruces I find that Picea excelsa makes a good stock for all the piceas, but the silver spruce, abies, will not do at all on this stock. For all the silver section such as Abies concolor, Siberica, Nordmanniana, Frazerii, Cephalonica and a host of others of this section, I find the best we have for stock is Abies balsamea, although I think it would be better to use the silver fir of Europe, Abies pectinata, which is a more vigorous tree although not quite so hardy when young.

The common Arborvitæ, will do for most of the chamæcyparis (retinospora) although I think that if they could be had, well rooted plants of Chamæcyparis pisifera are as good as any. All the junipers grow well on J. Virginica. The common hemlock is good for all the various forms, as well as the Japanese varieties, while the Douglass fir seems to be best suited for the forms of Pseudotsuga. The common larch L. Europæus is a good stock for all forms and varieties that I have tried.

[TO BE CONTINUED.]

The World's Fair.

Mr. Robert Craig has arrived from Philadelphia with two car loads of plants, one car containing his own exhibit of palms and other decorative plants, and the other the cacti to be shown by A. Blanc & Co. Mr. Craig's exhibit contains many beautiful specimens of decorative plants, mainly trade palms in extra fine condition. The cacti from Messrs. Blanc

GLIMPSES OF THE RECENT FLOWER FESTIVAL AT SANTA BARBARA, CAL.

& Co. will be used to fill a big bed in front of the Horticultural building.

Among other late arrivals are the plants for the horticultural display of the French government, which contains a large number of beautiful decorative plants, and two large lots of magnificent rhododendrons from two French nurserymen. Some of the rhododendrons are four to five feet across and all are filled with buds nearly ready to open. They arrived in splendid condition and will soon be in gorgeous bloom. The roots of each plant were encased in basket work material packed with moss.

In the greenhouses the calceolarias are still in fine bloom and nearly every plant shown has unusual merit. The lot shown by Vilmorin is most remarkable for advance in colors and markings, though every entry shows something extra good. The plants are all admirably grown and under Uncle John's fostering care have had full opportunity to show all the good points they possessed.

Another very interesting feature of the display in the greenhouses is the collection of begonias of rex varieties and rex hybrids shown by Hill & Co. The advances seen in the hybrids grown by this firm are in several instances quite remarkable.

In another space is to be seen the 8,000 cannas belonging to Messrs. Robert Craig and H. A. Dreer of Philadelphia. These are to be planted in a huge bed in the grass plat near the lagoon, just east of the south end of the Horticultural building. The collections include all the new and standard sorts, and many varieties that will not be in commerce till next year. A similar display of cannas will be made by the New York men, under the control of Mr. James Dean, in the corresponding plat opposite the north end of the building. These displays will furnish a magnificent opportunity for the florists of America to study the varieties and note the wonderful progress made in the canna during the past few years.

The big pansy beds on the east side of the Horticultural building are just beginning to show a little bloom. The plants suffered considerably from the miserable spring weather but will make a good show in spite of adverse conditions. The beds on the west side of the building, planted by J. C. Vaughan, are more advanced and many excellent flowers are already to be seen.

Under the north section of the dome in the Horticultural building Messrs. J. H. Small & Sons, of Washington, have built a huge model of the national capitol of Cape flowers.

Pitcher & Manda's display seems in excellent condition and it is certainly the most attractive show of plants in the building, but many of the crotons and very tender plants have had to be taken to the hospital. The effect of the wretched weather that prevailed when the plants arrived has made itself apparent. But the extent of the display can be understood when it is said that even during the absence of the sick and disabled it is still one of the centers of attraction.

The New York state exhibit is now complete with the exception of a few finishing touches. The arrangement of this section of the space around the mound under the dome reflects much credit upon Messrs. Dean and Donlan. It is an artistic conception and well carried out.

One thing is now certain, the Floricultural display will be a complete success, and further, it will draw the largest share of visitors. The crowds in the Floricultural divisions of the Horticultural Building are always greater than those in any other department of the Fair.

The fruit display is getting into shape but much work is yet to be done in this Bureau. In the division of viticulture, the display in which consists mainly of wines, etc., very few cases have yet been unpacked.

The Flower Market of To-day.

Only a few years have elapsed since anything in the shape of a rose found a ready market in all the great trade centers. Buyers, as a rule, were not captious, taking readily whatever the grower laid before them, long stems, short stems, culls and all, and paid him his price.

Those were halcyon days. The memory of them even, brings peace to the mind during such seasons of surfeit as succeeded Easter week. But all this has changed. The prosperity which came to the few, speedily brought a large number of competitors, the product greatly increased, and the buyers, instead of the sellers, became the ones to

regulate prices. New York city was the first to feel the increased product and the grower who desired a margin of profit was obliged to produce a higher class of goods. As population and wealth have come to other trade centers, they too, have discriminated against the careless grower, and his product has often gone to the waste pile. And so as one city after another approaches in supply the maximum amount that can be consumed, in just that ratio are the lines drawn as to quality. The average grower, who would take the same class of flowers to any of our great markets that was accepted ten years since without a murmur, would become the laughing stock of buyers to-day. Our markets now demand the very best that can be produced, and the grower who does not avail himself of, and put into use, every facility for the production of a high grade of stock, will soon find cause to complain that his income does not cover his expenses. If we have been groping in the dark for the past decade in the method of building, if it is clearly demonstrated to us that the one thing necessary to success is to reverse present methods, then by all means, since we cannot either stop or change the course of the sun as Joshua is said to have done, let us turn our houses "right about face," and have the short span where it will do the most good.

If other methods or appliances, or if a closer attention to details promise greater success, let us adopt them also, but at the same time let us beware of placing our imagination, or our unsupported belief that this, that or the other thing will prove true, in the place of cold, hard facts, that have been well proven. Do not let us jump at conclusions.

Among the news notes in the FLORIST a few weeks since, was a statement which suggested to me this line of thought. The article in question was that a certain rose grower, was having phenomenal success. He found a ready market for his crops although all of his houses were carried at the same temperature, and the plants of various kinds were grown in the same kind of soil. The writer went on to say that the buds might not be as large as some, but that the yield was good.

Many another grower has followed that same system and found a ready market for all he cut, but those were days when buyers were not as critical as they are to-day. Let the output of such a place be sent to one of our large markets, where it would have to compete with that of a hundred growers who are giving attention to the most minute details connected with growing, and see what the result would be. The simple question then would be, will it go to supply the wants of a Thorley, or those of a fakir?

The grower who is so fortunately situated as to be able to dispose of his entire cut without regard to quality, should make the most of his opportunity and instead of constantly putting his profits "into sash" should invest them in something that will be safe, and that will give a fair rate of interest. The onward march of supply will soon cover the demand in his market also, and competitors will oblige him to produce a better article, and in all probability, at a lessened profit.

Turning again to the thought called out by the item referred to, if you would place a product upon the markets of to-day which will yield you a profit, it must be first-class in every respect, and to produce such an article should be the constant study and aim of every grower.

M. A. HUNT.

Miscellaneous Seasonable Hints.

In this latitude the last week in May or first week of June is as early as veranda or window boxes can be filled or placed outside. This beautiful style of embellishing a home is appropriate for any house, whether the most costly mansion or the humble cottage. The simple window box was the beginning of this style of gardening, the box being placed on the sill, but of late years it has evolved into the veranda box, many of our customers having as much as 100 lineal feet. Where they are placed on the veranda will depend entirely on the style of veranda. If of stone with a flat coping there is the proper place for the box. But if the veranda is of wood, which the great majority are, then place the box on the platform at the foot of the bannisters. They will of course in most cases want wiring to the veranda. The best size for appearance and the welfare of the plants is nine inches wide at top, eight inches at bottom and six inches deep, all inside measure. Paint the box any shade that suits the house or surroundings; a deep green or drab is in many cases suitable; and don't forget to have a three-quarter inch hole in bottom of the box every nine or ten inches. The length of the box will depend entirely on the size of the job. If there is over twelve feet make them in sections of not over six feet each, if larger than that it takes three or four muscular men to lift them when filled. If the boxes are small, say three or four feet, you can fill them at the greenhouse and give them a week's start, but they take up lots of room and you can only do this with a limited quantity. With all big jobs you will have to cart the plants and soil to the house. This is considerable labor, but you can arrange to make a day of it with a big force and can fill several hundred feet in a day if you make it a "special order of business."

Use the best of soil, with plenty of rotten manure and cover the soil near the front edge (or entirely) with green moss. This will prevent the hired man and his hose from washing the earth on to the lawn. Veranda boxes invariably do well and are satisfactory with any ordinary care, and I scarcely remember any one giving them up after once having them. Many people who have costly houses built on comparatively small city lots object to having their lawns cut up for flowers beds and where *very properly* there are no fences, complain that the children and dogs (both classed alike if their neighbor's) run over and destroy them. This however can't be laid against the veranda box.

There is a great variety of plants that can be used, and where there is twenty-five feet or over, each section can have a distinctive feature. The drooping plants are of the greatest importance and if well filled the boxes will be entirely hidden by the vines. You must be guided as to the quality of the plants by the price you get. From 75 cents to $1.50 per running foot is the price you can get. If the latter price, you can afford to use some cheap palms, dracænas, etc. If the lowest price you can't afford to use plants more expensive than cannas, geraniums, begonias, etc.

The following is a list of the plants that always do well and will stand the sun and wind and the unskilled attention of the ordinary hired man: For upright plants the best are Areca lutescens, Latania borbonica, Kentia Forsteriana, Cureuligo recurvata, cyperus, Dracæna indivisa and australis, Aralia Sieboldii and variegated, Grevillea robusta, aspidistra, Caladium esculentum (sparingly), cannas of the Crozy type, coleus of all kinds, achyranthus, centradenia, centaurias, fuchsias (if shady), nephrolepis, and last, but of most importance, geraniums of all the flowering kinds as well as the variegated and bronze type. You can use larger and stronger growing vines than would be suitable for a hanging basket; the chief is the vinca, variegated and Harrisonii, senecio (German ivy), tropæolums of the running varieties, ivy geraniums, Ipomœa Mortonii, lophospermum, Lobelia gracilis, variegated glechoma, money vine, variegated abutilon, Solanum jasminoides, double sweet alyssum, single petunias, and several others.

Firm the soil well around the plants and round it up slightly so that John Thomas does not over-soak them in his daily watering.

A plant that makes a box very gay when first planted is Anthemis coronaria with its bright double yellow flowers, but it soon plays out and isn't desirable. The same can be said about hydrangeas, they soon lose their flowers and then they are nothing. If the position is very shady Begonia rex is a splendid plant for the place.

WM. SCOTT.

Buffalo, May 8.

New York.

The May meeting of the Florists' Club was held in the Elks' room on West 27th street on account of the unfinished condition of the Palace building, where arrangements had previously been made. Mr. Samuel Henshaw gave an interesting account of a trip to Trinidad. It was announced that the schedule for the fall show was now in preparation and would soon be complete. Intending exhibitors are assured that it will be essentially the same premium list as that of last fall and that they can feel perfectly safe to go ahead and prepare their plants in accordance with that list.

The monthly show will be held from May 22 to 29 at the Grand Central Palace on the palm garden floor. It will be in connection with the Press Club Fair, and free season tickets will be issued to all members of the Florists' Club, admitting to the fair for that week. Mr. J. M. Keller, chairman of the exhibition committee, has worked incessantly and is entitled to great credit.

Mr. August Rolker celebrated his silver wedding on May 5. He wishes it distinctly understood that it was a silver, not a golden wedding, it being very generally accepted that he is the father of the other Messrs. Rolker instead of being only their brother, and he protests vigorously at the imputation of such extreme youth to them or advanced age to him. They, on their part, take much pleasure in posing as his sons.

There was quite a little sensation one morning recently at the 34th street flower market raised by the arrest of a well known character who rejoices in the name of Gerasimos Priamus, generally known as George, the king of the Greeks. The offense for which he was arrested was chasing one of his countrymen through the street with a revolver in one hand and a knife in the other. The general sentiment among the retail florists is that if the Greeks would all chase each other out of the country it would be a blessing, but the growers think differently.

Cut flower trade has been depressed during the past week. Good white car-

nations continue scarce. Lily of the valley has shown an increased demand. Violets are about closed out for this season. Sweet peas sell at sight. Among the novelties coming in are cornflowers from Mr. Gamewell of Hackensack, N. J. Wiegand's Jacqs and crested moss roses are wonderfully good.

Warendorf has got well settled in his new store at 1213 Broadway. Hanft Bros. have also got moved into their new place at 1125 Broadway.

Mr. John H. Taylor is mourning the loss of his mother, Mrs. E. N. Taylor, who died in New York on April 25.

Boston.

The May exhibition at Horticultural Hall on Saturday, May 6, was not extensive, but most of the exhibits were superb. This was especially true of the calceolarias shown by John L. Gardner. Better grown plants could scarcely be produced. They measured from two to three feet across, were covered with bloom, and the flowers were of immense size and most brilliant colors. J. H. White's calceolarias were of excellent quality, too, and those from E. S. Converse were much ahead of the average.

Wm. Nicholson showed two new carnations, named Nicholson and Ada Byron. The color in each is similar to that of Tidal Wave, but rather lighter in shade. Blooms of the Nicholson measured three inches in diameter, and the Ada Byron is perhaps the most fragrant variety ever shown here.

The pansies shown by J. S. Fay and Denys Zirngiebel were remarkable for form, color and size. From the Bussey Institute came a fine lot of ixias, and from N. T. Kidder a lot of beautiful streptocarpuses and well grown pelargoniums. Norton Bros. showed two well bloomed plants of Dendrobium thyrsiflorum, and F. B. Hayes a number of hydrangeas.

Mrs. P. D. Richards was on hand with her customary contribution of native flowers, and as usual this corner of the hall seemed to be the most interesting to the visitors. Winter Bros. showed some dishes of tomatoes which were remarkable for their evenness and perfection in all points.

The season is full three weeks late in the Public Garden. The hyacinths are almost alone in their glory as yet. A large slice has been taken off the city nursery and greenhouse grounds to make room for an extensive addition to the City Hospital, which adjoins the grounds. This will cramp Supt. Doogue in his operations, for he had none too much room as it was.

The early blooming shrubs are beginning to show up in bright spots here and there at the Arnold Arboretum. There are four varieties of rhododendrons now in full bloom. Rhododendron præcox, R. Early Gem, R. Dauricum var. mucronulatum, and R. Dauricum, var. sempervirens. Andromeda floribunda is also blooming splendidly.

Capt. Ball, of the British steamer "Georgian," entertained a number of his florist friends, on board the big ship when he was last in Boston. As on all such occasions the boys had a good time, and Lawrence Cotter's wit shone more brilliant than ever.

Burt Eddy, the "big man," big in every respect, hailing from the big town of Chicago, is now visiting the Hub, and looking for big orders for his big bulbs and other big bargains.

At the May meeting of the Florist Club. Mr. Jas. Comley read his very entertaining paper on his trip to Japan. The paper was practically the same as that read before the Horticultural society recently, and was greatly enjoyed by those who were present.

Hitchings & Co. are building a large palm house, rose house and cold grapery for Mr. F. L. Ames at North Easton. They are to be of iron and will be fine examples of modern horticultural architecture.

Robt. E. Berry, of Hyde Park, sustained a very bad compound fracture of the thigh, caused by a kick from a horse which he was driving. He was taken direct to the City Hospital, where he now lies, and it will be some time before he can be removed to his home. Much sympathy is expressed for him.

Philadelphia.

There have been two good days in succession at last, and as the 10th of May, the frost limit in this locality, is past, planting time is on and the stocks of bedding plants with which the houses of the florists are crowded, will soon be gone. There is no wholesale plant market in Philadelphia, but a great deal is sold on the street corners at retail. There was an effort made some few years ago to establish a market at the city hall, which would be an advisable place for it, as both the streets and pavements surrounding this marble pile are very wide; but the vision of the growers was so contracted that they could not see the advantages that were likely to follow such an arrangement as this, the step was too great for their timid feet. Their customers at considerable inconvenience to themselves had always sought them out and why should they go to any trouble to put the stock before them? They would come after it. Then besides, if they did help establish a wholesale market, Brown, Smith and Jones, would come and back their wagons up right along side and get the benefit of their customers. No sir! the old way was good enough for them! And so the movement came to naught. But Philadelphia is growing very rapidly, and before long we hope to see a wholesale market that will be a credit to the trade and from which great benefits will be derived.

The May meeting of the Florists' Club was well attended. President Craig being absent on his Chicago trip, and vice-president Ball being still confined to the house with that whooping cough, Robt. Kift was elected chairman of the meeting.

Chairman Westcott of the house committee called the attention of the boys to the approaching convention and the necessity of the bowlers getting in shape to bring back the Spaulding cup. In consequence of his remarks, a match will be started the coming week, and from among the contestants will be chosen the team to represent the club in St. Louis.

Mr. Taplin read a very excellent and carefully prepared paper on modern methods in growing tropical plants, which was well received. A resolution was passed giving Mr. Taplin the thanks of the club for his essay, which was then referred to the committee for publication.

For the next meeting "The most economical fuel for heating greenhouses" was the subject adopted and Mr. J. Heacock was appointed to prepare the essay.

Two gentlemen were elected to membership and several names were proposed for action of the next meeting.

The club now adjourned to the "smoker," which was held in a large room in the rear of the library. Mr. Westcott and a corps of assistants served refreshments and cigars, while other members sang songs, made speeches, told stories, and all helped in one way or another to make the first smoker a success.

Business in the club room is looking up. At the match on Thursday night last Westcott's team of nine men defeated the Harris nine by 171 pins. Two games were played. J. Crawford of the Westcott's covered himself with glory making an average of 178 pins in the two games.

Chas. F. Evans of Rowlandville was presented on Friday last with a son. Congratulations are now in order.

Jacob Becker is sending in some very fine Brunners and Jacqs in 6 and 8-inch pots. They are first-class in every respect.

Business in the stores is falling off gradually, but prices hold about the same, as the supply seems to be diminishing. Mermets are beginning to lose color and the La France will soon begin to assert itself. La France and Albany are the "Summer Queens" in this locality. K.

Chicago.

The flower trade remains in much the same condition as last week, similar prices prevailing. Stock is more plentiful, the result of two or three days of bright weather.

In roses, Gontiers seem the first to sell; they are a favorite rose in this market, and are coming in fine quality. There is also a good demand for Bride. La France, Albany and Mermet are plentiful, ranging from fine roses to very poor, and though the good stock goes well, there is no demand whatever for the poor. Remarkably fine Beauties have been sent in by Miller of Hinsdale, grown in short-span-to-the-south houses; they were the best we have seen for some time. Hybrids are pretty well over, though we see some nice Jacqueminot and also Baroness Rothschild and Mabel Morrison. The Brunners are reduced now to a few stragglers.

White carnations are still scarce, but the quality of stock received is good. The quantity of sweet peas is increased and we now see Blanche Ferry in; the price rules lower than last week. Violets are decidedly scarce and the average quality is poor. Pansies are plentiful, and callas are a glut.

In outdoor stuff, there are good narcissus, poet's, Von Sion and double daffodils from the vicinity of Chicago, and good tulips from the southern part of the state. Fine irises and Lilium candidum are seen from farther south. Lilac is rather scarce, having been injured by late frosts and cold rains. A quantity of snowball is in, but it is hardly called for at all, there being much less demand for it than there has been previous seasons.

Smilax is a little more plentiful, though the price still holds up. Of late the local commission men have been introducing largely the leaves of Galax aphylla ("Siberian Ivy," as some call it, cheerfully ignoring the fact that it isn't Siberian and isn't an ivy), which is evidently a very useful thing to the trade. These leaves are round heart-shaped, shining bronze-green, and if the stems are put in water they will last indefinitely. It seems likely to be a very useful thing for Decoration Day, as low-price wreaths made of it would be attractive and lasting. At the present time society is unusually busy for this time of year; receptions, dinners and luncheons are plentiful on account of the influx of distinguished visitors to the

World's Fair, and all this social activity helps the flower trade materially.

The firm of T. J. Corbrey & Co. is now dissolved, and the business is carried on at the old stand by Mr. Corbrey alone.

E. H. Hunt's wholesale cut flower store is about to be moved to its former quarters in the rear of his seed store.

Kirscht Bros. succeed P. N. Kirscht & Co. at Morton Grove. They will the coming season devote all of their 16,000 feet of glass to carnations and smilax.

The Gallagher Floral Co. has been incorporated with a capital stock of $20,000. The incorporators are M. F. Gallagher, Oscar J. Friedman and James Rosenthal.

Buffalo.

Business has been only moderate of late, which can be readily attributed to the wretched Falkland Island kind of weather we have had for some time; but a change is upon us at last, and business is immediately responding. As in other cities white carnations are in great demand. Of other flowers there is enough. The plant trade at the markets is in full swing, and makes a good many of the craft feel good.

The first of May brought about changes and the advent of a few new stores. Mr. George Hale has moved from 500 Main St., to one of the stores in the Genesee House; he has a fine window and makes an excellent display. Mr. Anderson is about to increase his store room at his present location. A magnificent arcade has been built running from Main to Washington St.; it will be a great thoroughfare for ladies going to the Washington market. Two firms have already flower stores in the arcade. Wm. Stahli (late foreman for Joseph E. Rebstock) and Smiley & Taylor. Mr. S. has for several years been an extensive flower and plant grower a few miles out of the city.

Mr. Dan'l B. Long has returned from Chicago and is so full of the World's Fair that he has promised to unload some of it, or what he saw of it, at our next club meeting.

The last of the bulb men was seen this week, but he only looked in at the door.

Mr. E. I. Mepsted has just completed his annual change of residence. He says he gained nothing in rent, but he likes to move, and he has been trying hard to get as near "the Professor" as possible, but never made such a good move in that direction as this one.

We enjoyed a brief (too brief) visit from Mr. Asparagus Plumosus Elliott, Boston, this week. We like to see such people, and hope next time he comes this way he can give us a little more of his time. W. S.

Washington.

The spring plant trade of the market florists has fairly begun, and the growers are more than pleased with the outlook for the season, though the past two weeks have been exceptionally cool and rainy. They have disposed of a good quantity of bedding plants each market day, and have booked a number of orders for later delivery. It is never safe to risk out tender plants in this section until after May 10, therefore the florists' busiest days do not begin until after that date. The plants offered for sale this spring are unusually fine, clean and healthy.

Some fine specimens of decorative plants, such as palms, dracænas, crotons, rubbers, pandanus and ferns can be seen on the stands of Clark Bros., Ed. Miller, C. Strauss & Co., Gude Bros., Glorious and Studer. The sale of such stock has been very satisfactory during the entire winter.

Cut flowers are a drug on the market at present, partly owing to the fact that the country people are bringing in many spring flowers and are offering them at much reduced rates. Lilacs, spiræas, pæonias, flowering almonds, Chinese narcissus, tulips and loniceras are brought in in quantities by them.

Next week will mark the beginning of the planting in the parks and reservations throughout the city, which will probably not be finished before the middle of June; if the weather is not favorable it will run into July. Hyacinths and tulips are at their best just now in the smaller reservations, and the White House and Agricultural grounds. In the latter they are simply perfect. Mr. Wm. Saunders, the able superintendent, had them planted in such a manner as to produce the very finest effect, and his efforts have been crowned with success. They are far superior to any thing of the kind ever produced in the city.

The shrubbery through the parks begins to look as though spring had come, flowers can be seen in every direction. Lilacs, spiræas, Magnolia purpurea, pæonies, Caragana floribunda, cherries, apples, flowering almonds, Cydonia Japonica and many others, including Staphylea Bumalda which is quite attractive at this time. In the Botanic Garden are several fine specimens, some of them seven to eight feet high, which are at present covered with their fragrant white or rather greenish white flowers. It is a native of Japan, easily propagated from cuttings, and when prepared for the purpose does very well to force for winter flowering.

Society is almost at a standstill, consequently the store florists have a breathing spell after a long and busy season. They are all unanimous in saying this has been their best season since they began business. Their principal calls just now are for weddings and funerals.

At a special meeting of the Florists' Club held the evening of April 26, Mr. Philip Gauges read a paper on chrysanthemums, which was attentively listened to, after which a vote of thanks was tendered him. The committee appointed to confer with the board of managers of the Reform School with reference to the growing and selling of plants and cut flowers by that institution for less than market rates, reported that they had had a conference, but that no definite solution of the question was reached. The committee will make a further report soon, together with some recommendations. Mr. C. F. Hale, the chairman of this committee, proposes to push this matter, even should it be necessary for him to bring it to the attention of congress.

C. LESLIE REYNOLDS.

The Spring Exhibition of the New York Florists' Club.

There could hardly have been more unfortunate circumstances and discouraging surroundings than those which attended the opening of this much-talked-of show. Not content with having postponed the date to a time when a first-rate display of spring flowering plants was an impossibility, and sending leading exhibitors with their best productions, off to Chicago, the fates decided to call the weather to their assistance, and by means of the most dismal storm of the season, with rain swept streets and wild winds stamp out if possible the last and only opportunity to save the show from utter failure.

This was the state of affairs during the first half of the week. A magnificent orchestra played music which alone was well worth the price of admission to hear, but it played to an empty house. Later, when the sun came out and fine weather prevailed the attendance was good and the presence of large numbers of society people showed what might have been expected had the weather been favorable.

The show as a whole lacked completeness. The decorations of the hall were not nearly as effective as on previous occasions, and there was a deficiency of large plants and trees to give a suitable background for the solid masses of color shown in the closely packed groups of spring flowering bulbs. Had it not been for the contributions from Pitcher & Manda, a moderate sized hall would have accommodated the show. There were no exhibits of a sensational character, and very few novelties.

Pitcher & Manda's large palms, also those from J. B. Colgate, Richard Brett, gardener, the Indian azaleas from these two exhibitors, W. Bayard Cutting's superb group of rhododendrons, Pitcher & Manda's beautiful arrangement of herbaceous plants with its masses of pæonies, irises, aquilegias, doronicums, wood violets and other spring favorites, the big cycads from Siebrecht & Wadley, J. B. Colgate and George Bennett, J. M. Keller's unrivalled group of foliage plants and the three gorgeous mosaic beds of spring flowering bulbs from W. Siebrecht, Pitcher & Manda and Ernst Asmus, these were the main attractions on the floor of the great hall, and they were all grand in every way.

The tulips, hyacinths, lily of the valley and narcissuses in pans and pots were arranged on the tables which formed a border around the hall in front of the boxes. Pitcher & Manda's table of hyacinths presented an almost continuous line of blue first prize cards after the judges had been round, and the long stretch of tulips from Ernst Asmus presented the same cheerful front, Ophir d'Or, Kaiser Kroon, Salvator Rosa, Blanche Hative, Vermillion Brilliant and other prime favorites being shown in their best form. In fact these two exhibitors had the tulip and hyacinth department pretty much to themselves. Ernst Asmus and W. Siebrecht divided the lily of the valley prizes between themselves, the latter gentleman captured the Mrs. J. Pierpont Morgan special prize on display of narcissus, and Pitcher & Manda took first prize for ten pans of the same, with an unbeatable set. Many of the narcissuses on exhibition showed that it had been necessary to keep them for some time.

The Indian azaleas also gave evidence of the lateness of the show, and the display of these bore no comparison to what it would have been had it occurred a month earlier. There was only one exhibit of genistas and one of hardy azaleas, both from Pitcher & Manda. The azaleas were well bloomed but the colors looked dull against the brown floor and red draperies. It was too late in the season to see genistas at their best. The calceolarias from J. Hood Wright, C. A. Webber, gardener, although small plants were well grown and a fine strain. Second prize on calceolarias went to P. B. Meissner. A group of longiflorum lilies from Wm. Siebrecht was half covered with prize cards which were well won.

Nothing in the hall received more admiration than the big Hydrangea Otaksas from W. G. Eisele. The blooms on these were of marvellous size. Those from H. C. Wille were also well grown, but the heads were smaller. Pitcher & Manda were awarded first prize for a fine group of flowering plants, and Siebrecht & Wadley first on bromeliads. Some well grown mahernias in the exhibit of W. B. Cutting attracted much attention. Gloxinias were poor, and cinerarias were very small, so also were the nepenthes. Ferns from J. B. Colgate, were exceedingly well done, Adiantums Williamsii, gracillimum and Farleyense being specially fine. Pitcher & Manda and J. B. Keller also did well on ferns. The principal exhibitors in orchids were Pitcher & Manda and Siebrecht & Wadley, the former taking the first premiums, and also a special premium, for Cypripedium Greyanum.

The Mrs. J. C. Wilmerding special premium for calceolarias was won by J. Hood Wright; the Miss L. Langdon special for pansy plants, by Dailledouze Bros., the Mrs. Chas. Lanier special for araucarias by Pitcher & Manda, the Frank Thompson special for pair of palms by J. B. Colgate, the Mrs. John B. Trevor special for genistas by Pitcher & Manda, who also won those donated by John Eyerman for cattleyas and lælias, and by J. L. Cadwallader for azaleas.

The display of cut flowers was very meagre, caused in part probably by the insufficiency of the prizes offered, but the quality was excellent. J. N. May's collection of roses not for competition was much admired for the perfection of the blooms and received a special award. Ernst Asmus captured the John H. Taylor special for best pink rose with Mme. Caroline Testout. The John Henderson Co. and Ernst Asmus swept the deck between them on all popular varieties of roses with the exception of American Beauty, for which T. J. Slaughter and W. H. Young took first and second respectively.

The carnation prizes were well divided between Dailledouze Bros. and F. A. Storm, the Miss Whitney special for best three hundred blooms, one variety, being won by Ernst Asmus with the new Salmon Queen. Joseph Tailby & Son showed new carnations, Miss Henriette Sargent and Belle Hunnewell, the former receiving a special premium. It was rather late for violets, but those shown were equal to the best winter grown. G. T. Schuncman won the Mrs. Philip Schuyler special for best violets. Dailledouze Bros. and H. H. Francis are old competitors in the mignonette line, and this time Dailledouze Bros. came out on top.

Among the novelties shown nothing attracted so much notice as two blooms of seedling anthuriums contributed by A. P. Meredith, of Pittsfield, Mass. These blooms were deep blood red in color, and of immense size, and were awarded a special premium. One of them has been named Cuttingii in compliment to Col. Cutting, of Pittsfield. The collection of cut orchids and anthuriums brought by Geo. Savage, from Rochester, was very rich, and comprised some rare varieties. The blooms of double flowered tuberous begonias shown by S. T. Peters, were a surprise. In variety of coloring and size and fullness of flower, their equal has not been seen here.

Messrs. Weeber & Don made a superb display of seeds, bulbs and horticultural implements arranged with great neatness and taste. A fully equipped conservatory occupied the center of one end of the hall. It was of an elaborate pattern with iron frames, slate benches and bent glass. It was a fine specimen of Messrs. Hitchings & Co's workmanship.

The competitions in the floral decoration department were set for Friday afternoon. The weather was propitious, and there was a large crowd of visitors. On dinner table decoration, Warendorf & Son had no competitors, but their exhibit was well entitled to the premium. The table was round, with seats placed for twelve. The ware was of pink decorated china, and cut glass. There were four lamps of silver, with white shades, and in the center was a square embossed scarf on which was placed the center piece. This was of Mme. Caroline Testout and moss rose buds, with garlands of trailing arbutus radiating therefrom.

The same firm won the first prize on mantel decoration. The frame work of the mirror was composed of small adiantum plants, and across one side of the glass was a beautiful crescent of Luizet roses. The mantel was banked with Luizets and adiantums, and the fireplace filled with palms. From the apex of the mirror hung a garland of galax leaves. Second prize for mantel decoration was awarded to Herman Warendorf.

Ed. Weimar, of Mt. Vernon, N. Y., took first prize on basket of flowers, and Warendorf second. On bridal bouquets, Warendorf was first and Weimar second. For best vase of roses, Warendorf won first with one hundred magnificent Jacqs. Dailledouze Bros. received a special premium for a large group of hybrid roses.

One of the most pleasing features of the week was the entertainment of nearly two thousand children from the various Industrial Schools of the Children's Aid Society. One of the prime movers in this event was Mrs. George J. Gould, who is president of the kindergarten and Potted Plant Association, and through whose assistance the children were all provided with free transportation on the elevated railroad.

Mr. Samuel Henshaw addressed the children on the subject of chrysanthemum growing, illustrating with plants, pots and earth, and Mr. C. H. Allen gave them an interesting talk on flowers in general. After that they were marched to the big hall where they were permitted to view the Spring Exhibition, and on their departure each child was presented with a potted plant which they are expected to care for through the summer in competition for a number of prizes to be awarded in the fall. One of these prizes is a glass conservatory window, offered by Mr. C. B. Weathered for the best growing of chrysanthemums.

Throughout the week the daily press of New York has given great prominence to the exhibition, and many columns of space have been devoted to it. No occasion of a similar nature has ever received more cordial support from the press than this. One of the prettiest comments was the following extract from the columns of the *Morning Journal:*

"After the display of mightiness on land and water of last week, of which New York is so justly proud, we turn this week to the simple display of pure beauty as seen in the world of leaf and blossom at the Flower Show. It is well to note these contrasts, and well to enjoy them. While the hard lines of life demand so much keen effort as they do with Americans, the simple relaxation of regarding these gorgeous beauties of Nature will be found helpful. Then beauty attracts beauty. The fairest women love the fairest flowers, and he who goes to the Flower Show finds himself doubly repaid. Let us ponder over these sweet things of life for a moment amid the burdens and cares of existence. It will strengthen us against the tough times to come."

NOTES.

President Manda arrived from Chicago on the evening of the opening day.

Among the visitors were L. E. Wood of Fishkill, N. Y.; W. Wilshire and Joe Bennett of Montreal, Canada; Geo. Savage of Rochester, N. Y.; J. F. Huss of Pittsfield, Mass.; David Allan of Boston, Mass.; Edwin Lonsdale and H. H. Battles of Philadelphia, Pa. and W. Tailby of Wellesley, Mass.

It was again proved that carnations will not keep for any length of time in a large hall. Dendrobium thyrsiflorum is equally short lived.

Funny: Bonn & Dressel's scoop on dracænas, and Siebrecht & Wadley's on cannas.

There is quite a sum of money left on the schedule, uncompeted for, also several tempting special premiums.

In tall vases is not the proper way to stage pansy blooms. They should be shown on flats of green moss or fern.

W. Siebrecht's display of bulbs in boxes and pots which took first prize was greatly admired. It was a pity that there was not a third premium in this class, as there was little to choose between the two other exhibits.

The "organ recitals" failed to arouse any enthusiasm.

Manager McCrowe worked incessantly.

The anthurium blooms were a prime attraction.

Recent Legal Decisions.

Duty of purchaser when goods are received in bad condition.

A purchaser is not bound to receive and pay for a thing that he has not agreed to purchase; but, if the thing purchased is found on examination to be unsound, not to answer the order given for it, he must immediately return it to the seller, or give him notice to take it back, and thereby rescind the contract, or he will be presumed to have acquiesced in its quality.

Potter v. Lee. Supreme Court of Michigan, 53 N. W. Rep. 1047.

Remedies of purchaser defrauded by false representations.

A purchaser defrauded by false representations has an election of remedies: First, he may rescind the contract of purchase; or, secondly, he may recover damages for the fraud; moreover, a delay in acting which may prevent him from rescinding the contract will not prevent him from maintaining an action for the damages sustained by the fraudulent misrepresentations, where such action is not barred by any statute of limitations.

Griffing v. Diller. Supreme Court of New York. 21 N. Y. Sup. 407.

Patents Recently Granted.

Field or lawn mower—David M. Miller, Fairfield, Cal.; vine trellis—Andrew S. Hart, Morrisville, N. Y.; fruit pitter—Enoch W. Weare, Selma, Cal.

DO YOU WANT a list of the leading park superintendents of America? You will find such a list in our trade directory and reference book.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED By gardener, 28, single, 11 years experience in greenhouses, graperies and hotbeds and in outside flowers and vegetables. Best Chicago refs. Address G J, care American Florist.

SITUATION WANTED—On a private place, by single man, thoroughly competent; ten years experience in Scotland, three in United States; good references; state wages. Address A G, 10 North Fourth St., Harrisburg, Pa.

SITUATION WANTED—By a first class florist, German, single, age 26, who understands all about florist and landscape gardening, strictly sober, as foreman, on private place preferred. Best of references. W, care American Florist.

WANTED—Young lady florist; must be good saleslady and designer. ART FLORAL CO., 3911 Cottage Grove Av., Chicago.

WANTED—A sober, reliable man, thoroughly competent, to grow roses, carnations, and a general assortment of plants. State wages and reference. Address, M J L, American Florist.

WANTED—A competent man as a working foreman, must be first class grower of roses, carnations and plants, and a good designer. Address with copies of references and wages required. G. SOUSTER, Elgin, Ill.

WANTED—A single man to grow a general line of plants and cut flowers; should know how to make up cut flower work; American preferred. Good wages to a good man; none other need apply. Address J. W. DAYHOFF, Hagerstown, Md.

WANTED AT ONCE—Florist and gardener, single, German preferred; competent to take whole charge at times; must understand the business in all its branches, especially roses and carnations. First class references required. Wages $35 to $40 per month at start, also board and lodging. Apply to CARL BEERS, Bangor, Maine.

FOR SALE CHEAP—Second hand No. 1 Exeter boiler, 18 sections, 25 horse power, as good as new; steam gauge, water gauge all complete. Price $300. This is half the price of new. Address J. G. BURROW, Fishkill, N. Y.

FOR SALE—3 greenhouses and stores fronting on one of the best business streets of Chicago. All well stocked, horse and wagon, 8 year lease paid up to March, 1894, right near public park. Proprietor is unable to tend to it. Price $2,500; half cash, balance in good secured notes. Address M. care American Florist.

FOR SALE—Florist business, consisting of 2 new greenhouses 100x25 feet and 50x16 feet, also new 9 room dwelling, all heated by the Furman steam boiler. Three lots, each 51x180 feet. Fine location in a rapidly growing city. 1 hour's ride from Chicago. Will be sold at a bargain on account of poor health. Apply to J. B. MODERWELL, Masonic Block, Wankegan, Ill.

FOR SALE.

An old established florist business, containing about 10,000 feet of glass, four large grape and four plant houses in good order, heated with hot water, steam pump, tanks, etc. Property is free and clear. Terms easy; from 2 to 6 acres of land; 30 minutes from Grand Central Station, N. Y. City; 75 trains daily; 10 minutes from depot. This is a rare chance for the right party. For particulars apply to E. HICKINS, Yonkers, N. Y.

5,000 FEET OF 4 INCH HOT WATER PIPE FOR SALE.

Also 3 of Myers Boilers and one Saddleback, all in good order; also 2 15-horse power steam boilers.

Wm. K. Harris, 55th & Woodland av., Philadelphia Pa.

FOR SALE OR LEASE.

Owing to poor health I offer for sale my florist establishment containing two acres of ground, dwelling house, barn and about 16,000 feet of glass heated by hot water. I will also lease to a reliable party. No better opportunity is offered for a man to establish himself in a paying business. For further information address

HANS NIELSON, St. Joseph, Mo.

For Sale at a Bargain.

An extensive green-house establishment, located fifty miles from Boston in a city of fifty thousand inhabitants. The estate consists of ten green-houses, each from fifty to one hundred and fifty feet long by twelve feet wide, all thoroughly heated by the Weatherd Boiler, stocked with ten thousand bedding plants in best condition for spring sale, and also, roses and carnations and smilax planted in open bed; a dwelling house of six rooms, a barn and carriage house; and also 87,000 feet of land planted with apples, pears, grapes, raspberries, blackberries, and ornamental shrubs, and containing a trout and lily pond, with running stream.

This offers a rare chance for any one desiring to enter the business. Only ten minutes walk from the R. R. station. Electric cars pass the door. Large home trade. Apply to WELCH BROS., 2 Beacon St., Boston.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

FOR SALE.

Rider Pumping Engine, cost new $325.00, will sell for $100 cash; reason for selling, now have city water.

TIPTON & HURST, Little Rock, Ark.

SPLENDID OPPORTUNITY To let on lease for eight or ten years, a large property for greenhouses in most desirable locality; extra good home market; church near by, street cars running past premises, and within twenty minutes ride of public buildings. Address J. W. Moore, St. Vincents' Seminary, Germantown, Philadelphia, Pa.

A RARE CHANCE.

For sale, on account of ill-health, a flower store, established since 1884, doing a good business in the flourishing city of Hoboken. Apply to

A. & E. ASMUS, 515 Washington St. HOBOKEN, N. J.

TAKE YOUR CHOICE.

FOR SALE—An old established Florist Business at Dorchester, Mass., comprising 20,000 feet of land centrally located, on which are: 1 house 70x18 filled with Carnations; 1 house 60x16 filled with Roses; 1 house 70x11 filled with Violets; 1 house 70x10 filled with Violets; 1 sash pit 70x7 filled with Violets; 1 dwelling house 7 rooms. Plants in good condition and houses in good repair. Price $6,000.

FOR SALE OR RENT—A well equipped establishment within eight miles of Boston, comprising 8 acres of land on which are 1 house 120x20 filled with Mermets and Silver Sprays; 1 house 100x24 filled with Wilders and Plants; 1 house 100x11 filled with Wilders; 1 house 100x11 filled with Adiantums, 9-in. pots; 1 house 100x11 filled with Callas and Bouvardia; 1 house 100x11 filled with Callas, Bouvardia and Portia; 1 house 100x11 filled with Violets and Mignonette; 1 heated frame 100x6 filled with Mignonette; 1 propagating house 75 ft. long. Price $22,000.

FOR SALE—Eight miles from Boston, 1 acre of land, 8,000 feet of glass, including 4 houses, 100x18, 1 dwelling house 7 rooms. Apply to

N. F. McCarthy & CO. 1 Music Hall Place, Boston Mass.

For Sale by Tender.

Tenders will be received by the undersigned until the 15th of May ensuing, for the real estate, stock and business of the Halifax and Amherst Nursery Co.—either separate or en-bloc.

The Halifax Nursery has been long established and enjoying a very extensive and satisfactory business connection. The nursery and buildings cover an area of about 4-5 of an acre. On the premises are three green-houses, 100x17, one 100x24, one 60x15, workshed 80x20, under which are the heaters. The houses are well stocked with the best varieties of all kinds of useful and ornamental plants. In the ground there are very valuable collections of hardy herbaceous plants, shrubs and trees.

Also a good stable, coach house, pit and frames and necessary requisites to conduct the business.

The Amherst Nursery—embracing an area of about two acres, is situated in a flourishing part of the Province in a thriving town of the same name. The buildings consist of dwelling house, two green-houses 70x24, well stocked with all the requisites necessary for a good local trade.

The highest or any tender not necessarily accepted. For particulars and reasons of sale, Address

Dr. C. O. Tupper, AMHERST, N. S., Canada.

ASSIGNEE'S PUBLIC SALE.

COTTAGE PLACE GREENHOUSES.

On Monday, May 28th, 1894, the undersigned assignee of A. Bitner and wife, will by virtue of an order of the Court of Common Pleas, of Lancaster Co., Penn., sell at public sale at the Leopard Hotel in Lancaster, Penn., the celebrated Cottage Place Greenhouses, adjoining Lancaster, with city office No. 16 Center Square.

These well known greenhouses will be sold in two parts. The older plant, being all east of West street, consisting of 35 green-houses, with about 30,000 square feet of glass, three large boilers, pumping engine, two stand pipes, containing 70,000 gallons, wells, pumps, steam heating pipes, etc., etc., together with boiler house, stable, wagon shed, and other necessary buildings.

Second; the new plant, consisting of a lot of ground, 228 feet front on the west side of West street, and 100 feet deep, on which are erected 30 greenhouses, with about 20,000 square feet of glass and two large boilers in position. This plant is not finished, the pumping and heating arrangements not being completed.

A very accurate map of these properties can be seen at the office of W. F. Beyer, Esq., No. 43 Grant street which intending purchasers should consult.

Lancaster County, Penn., is recognized everywhere as the "garden spot" of the Union, and the soil of this locality is unequalled even in this county for the production of roses, carnations, and indeed all kinds of flowers.

The advantages for shipping are unexcelled, having both the Pennsylvania and the Reading systems, with all their connections.

To those desiring to enter the greenhouse business this sale offers the best possible opportunity.

Mr. A. Bitner, adjoining the premises, will show the properties.

Sale to begin at 7:30 P. M., when terms will be made known by

R. J. HOUSTON, Assignee of A. Bitner and wife.

FOR SALE.

The Oldest Seed and Florists' Store in New Orleans

on account of retiring from store business, a large selected stock and good patronage from the best class of customers in the city. Address

R. E. SIMONS, New Orleans, La.

FOR SALE OR TO RENT.

The following greenhouse property, situated on the outskirts of Springfield, the City of Houses; or will sell Greenhouses, Stock and Fixtures and give ten years' lease of 2 acres land. Ten houses in all—5 houses, 10 feet wide, 65 feet long; 4 houses, 18 feet wide, 65 feet long; 1 house, 18 feet wide, 65 feet long. Steam plant! New double Florida Boiler. Stock in good condition, with a large and extra good home market. This is an opportunity in a life-time, as present owner has other interests to look after. If you are looking for a chance, apply at once to

N. D. WINTER, 5 Elm Street, SPRINGFIELD, MASS.

Cape Flowers, new crop in best white quality at $1.25 the lb.; 10 lb. lots, $10 net.

Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 30-in. upwards, at 45c., 50c., 60c., 75c. and $1.00 each, according to length.

Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.

Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.

Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc. For prices consult our

Trade Catalogue, mailed free.

August Rölker & Sons, 136 & 138 W. 24th St., P. O. Station E. **New York.**

IF YOU NEED ANY

Cape Flowers, Immortelles, Grasses, plain or fancy **Baskets, Metal Wreaths, Letters, Doves,** or any other thing in the Florists' supply line, mail us your order.

REMEMBER WE ARE THE

Leading Manufacturers of Wheat Sheaves and Baskets, and Importers of **Florists' Supplies.**

Catalogue on application.

ERNEST KAUFMANN & CO.,

113 N. 4th Street, PHILADELPHIA, PA.

MARSCHUETZ & CO.,

FLORISTS' • SUPPLIES

23 & 25 N. 4th St., PHILADELPHIA, PA.

Send for Catalogue.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST.

ANCHORAGE ROSE CO., Anchorage, Ky.

The Grand New Forcing Rose,

"American Belle."

Prices and full particulars on application.

John Burton, Chestnut Hill, Philadelphia.

SUNNYWOODS

CUSINS & WATTEVILLES

Please write for prices.
Orders for

BRIDESMAIDS

are being booked now for delivery in

JUNE.

FROM 2¼-INCH POTS { $15 per 100 Plants.
PRICE ..... { 10 per 50 Plants.

FRANK L. MOORE,

..... CHATHAM, N. J.

Golden Returns.

200,000 ROSES 200,000

We offer well established, healthy plants in below named and many other sorts:

From 2-inch pots, $ 3.00 per 100; $30.00 per 1000
From 3-inch pots, 6.00 " 60.00 "
From 4-inch pots, 12.00 " 120.00 "
Not in excess of any one variety.

50,000 Hybrid Perpetual Roses 50,000

at $4 per 100; $40 per 1000, in 50 select varieties.

New and Rare Varieties at Special Rates given in our Wholesale List, now ready.

WE NAME A FEW SORTS ONLY:

Aurora, Bosanquet, Comt. de Labartbe, Bon Silene, Cels, Devoniensis, C. Mermet, Etolle de Lyon, Hermosa, Mme. Cusin, H. M. Stanley, Malmaison, Marie Guillot, Mme. Lambard, Marie Lambert, Marechal Niel, Kruger, Niphetos, Mme. Jos. Schwartz, Safrano, Perle des Jardins, Sombreuil, The Bride, etc., etc.

For anything in the Florist line, or send your lists to be priced. Address

The New White Rose

KAISERIN AUGUSTA VICTORIA.

From 3-inch pots, $25.00 per 100.

JOHN COOK,

318 N. Charles St., BALTIMORE, MD.

ROSES.

TEAS ..... $30.00 per 1000
HYBRIDS ..... 40.00 per 1000
Healthy plants, in 2-inch pots.
Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.
Trade list on application.

Jacob Schulz
LOUISVILLE

ROSES.

Finest stock in Northwest.

Duchess of Albany, La France, Catherine Mermet, Waban, The Bride, Mme. Hoste, Niphetos, Perle, Sunset, W. F. Bennett.

C. A. SMITH FLORAL CO.,

77 7th Street, South, MINNEAPOLIS, MINN.

ROSES.

MD. CAROLINE TESTOUT—The beautiful new hybrid Tea Rose, $25.00 per 100; $200.00 per 1,000,

HEINRICH SCHULTHEIS—An excellent pink hybrid Remontant Rose for very early forcing, $7.00 per 100; $60,00 per 1,000.

Chrysanthemums.

MRS. CRAIG LIPPINCOTT—Awarded a silver medal at Philadelphia, November, 1892. Yellow in color, VERY EARLY; large flower, broad petals. $3.00 per dozen.

TUXEDO—A beautiful orange colored flower, the best of this color for cut flowers. This should be grown in large quantities, so that the admirers of the Princeton College boys can get a color to their taste. $1.50 per dozen; $10.00 per 100.

EDWIN LONSDALE,

CHESTNUT HILL P. O. PHILADELPHIA, PA.

MADAME CAROLINE TESTOUT.

The best rose of its color in existence. It has been fully tested in the New York market and

IT SELLS.

Healthy plants from 2½-inch pots now ready. Per 100, $25 00; per 1000, $200.00; 500 at 1000 rates.

ERNST ASMUS, West Hoboken, N. J.

ROSES

FINE HEALTHY PLANTS FROM 2¼-INCH POTS.

Perles, Brides, Mermets, Niphetos, Papa Gontier, Hoste, Watteville, Cusin,
La France, Albany, Wootton, at . $5.00 per 100, $45.00 per 1,000.
Meteor at . . . . . $6.00 per 100, $55.00 per 1,000.
Climbing Perle, at . . . . . $10.00 per 100.

John Henderson Co.,

FLUSHING, N. Y.

ROSES.

We offer about 100,000 of the best varieties of Roses from 2 inch pots, good size and healthy stock. Also

10,000 Jacqueminot at $35.00 per 1,000, or $4.00 per 100

BRIDESMAID.

2 inch pots, per 100, $9.00; per 50, $5.00; per 500, $40.00.

American Beauty	per 100,	$6.00;	per 1,000,	$55.00
White La France	"	5.00;	"	45.00
La France	"	4.00;	"	35.00
Mme. Pierre Guillot	"	4.00;	"	35.00
Petunias, double			per 100,	4.00
Verbenas, fine assortment, per 100. $2.00; per 1,000,				18.00

Send in your lists and we will quote lowest prices for anything in the Florist Line. Address

NANZ & NEUNER,
LOUISVILLE, KY.

TO EXCHANGE.

Will exchange 300 2½ inch Daybreak Carnations for 400 Lizzie McGowan from 2½ inch pots.

MARKEY BROS., Ft. Wayne, Ind.

ROSES.

METEOR, 2¼ inch $6.00 per 100.
PERLES, 2¼ inch, $5.00 per 100.
PERLES, 2¼ inch, $45.00 per 1,000..

JOHN BURTON,

Chestnut Hill, PHILADELPHIA, PA.

Hybrid Perpetual Roses,

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.

Price Lists to applicants. Address

WILLIAM H. SPOONER,
JAMAICA PLAIN, (Boston), MASS.

SPHAGNUM MOSS. CLEAN, DRY, FINE. 1 Bale $1.25; 3 Bales $3.50; 10 Bales $10.00.

JOHN A. SALZER SEED CO., La Crosse, Wis.

ANCHORAGE ROSE COMPANY'S

American Beauties

2¼ Inch, Fine Healthy Plants, $7.00 per 100; $60.00 per 1,000.

ANCHORAGE ROSE CO., Anchorage, Ky.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

WE HAVE received the prospectus of a new French horticultural publication to be issued under the title "*L'Horticulture Francaise*" at Lyon by MM. Cusin Pere and Fils. It will be published semi-monthly and will be in the shape of a French dictionary of gardening, covering all greenhouse and open air ornamental plants, names, culture and synonyms.

DOUBLE CALLAS.—We have received so many of these of late that we beg to again remind our readers that such abnormal developments are not very rare and that such specimens are of no special interest, and are not worth wasting postage upon in order to send them to us.

THE advance premium list for the annual chrysanthemum show of the Horticultural Society of Chicago has been issued. Copies may be had on application to the secretary, Mr. Wm. C. Egan, 620 Dearborn avenue, Chicago.

THE DE LAMATER IRON WORKS, manufacturers of hot air pumping engines, New York, have removed their office from 21 Cortlandt St. to larger quarters at 87 South Fifth Ave.

PLEASE WRITE on your printed letter head when addressing our advertisers. If you have no printed letter head, then enclose your business card or bill head.

THE AMERICAN FLORIST and *Gardening* together to one address for $1.75. Send orders to the American Florist Co.

We are the People!
Who? KOFFMAN,
Where? WALDEN, Orange Co., N. Y.
What? SMILAX
25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.
When? ALL THE YEAR AROUND.
Also Adiantum Cuneatum Fronds
At $1.25 per 100.
And he pays the Express.

SAMUEL S. PENNOCK,
Wholesale Florist
REMOVED TO REAR OF 42 S. 16th ST.,
Philadelphia, Pa.

Have you noticed the scarcity of
WHITE CARNATIONS?

Now is the time when Cape Flowers, Immortelles, etc., become indispensable for Funeral and other made up work.

In Cape Flowers we are the leading dealers in this country. Our stock is the largest; it is all fresh, and you can depend upon the quality.

On these goods as well as on all Decoration Day supplies, Commencement Baskets, Jardiniers, Metal Wreaths, Wheat Sheaves, etc., we make bottom prices.

We are large manufacturers of these goods, and we sell no goods at retail.

PRICE LISTS ON SPRING SUPPLIES NOW READY.

H. BAYERSDORFER & CO.,
56 N. FOURTH STREET, PHILADELPHIA, PA.

ORCHIDS
I am handling the finest stock of Cut Orchids grown in this country and can supply them in any quantity. Also all other Choice Flowers.
T. J. CORBREY,
WHOLESALE AND COMMISSION FLORIST,
45 LAKE ST., CHICAGO.
CONSIGNMENTS SOLICITED.

BOUQUET GREEN,
HARDY CUT FERNS,
EVERYTHING GREEN
At H. E. HARTFORD'S,
18 Chapman Place. BOSTON.

Asparagus Plumosus Nanus.
CUT STRINGS: 6 to 10 feet long, 50 cents each. 12 to 18 feet long, $1.00 each.
In large or small quantities all the year round. The largest stock in the country.
W. H. ELLIOTT, Brighton, Mass.

WHOLESALE FLORISTS
La Roche & Stahl
N. E. CORNER 13th & Chestnut Sts., PHILADELPHIA.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE FLORIST,
1122 PINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STEET,
St. Louis, Mo.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.

	Per 100
Perle, Gontier, Niphetos	$ 4.00
Mermets, La France, Bride, Wooltons	6.00
Meteors	8.00
Jacqs	12.00
Carnations, short	1.00
" long	2.00
" " fancy	2.50
Romans, Valley, Narcissus, Tulips	3.00
Violets, Adiantum	1.00
Callas, Harrisii	10.00
Smilax	20.00

In effect till next issue of this paper.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
116 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.; Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange.
45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY
Wholesale and Commission
FLORIST,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

A. G. PRINCE & CO.,
Wholesale and Commission
FLORISTS,
45 LAKE STREET,
In Chicago Cut Flower Exchange. CHICAGO.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

WHITE DOVES
FOR FLORISTS.
Largest and finest stock in the United States. Write for prices to
S. J. RUSSELL,
103 Van Winkle St., Jersey City, N. J.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

Wholesale Markets.

Cut Flowers.

NEW YORK, May 9.

Roses, Bon Silene, Gontiers	1.00@ 3.00
" Perles, Niphetos	2.00@ 3.00
" Mermet, Bride, Hoste	3.00@ 5.00
" Cusin, Watteville	2.00@ 4.00
" Bridesmaid, La France	3.00@ 6.00
" Meteor	2.00@ 4.00
" Jacqueminot	6.00@12.00
" Beauty	10.00@40.00
" Hybrids	10.00@20.00
" Mme. Caroline Testout	10.00@20.00
Carnations	1.00@ 2.00
Valley, hyacinths, tulips, daffodils	2.00@ 3.00
Harrisii	2.00@ 5.00
Callas	3.00@ 6.00
Cattleyas	50.00
Mignonette	1.00@ 5.00
Adiantums	1.00
Lilac (bunch)	1.00
Smilax	35.00

BOSTON, May 9.

Roses, Niphetos, Gontier	4.00@ 6.00
" Perle, Sunset	4.00@ 6.00
" Bride, Mermet	6.00@ 8.00
" Jacq., Lulzet	12.00@25.00
" Brunner	25.00@40.00
Carnations	1.50@ 3.00
Violets	.50@ .75
Lilies, Harrisii and Longiflorum	4.00@ 6.00
" Candidums	3.00@ 5.00
Lily of the valley, tulips, daffodils	2.00@ 3.00
Narcissus Poeticus	1.00@ 2.00
Mignonette	2.00@ 4.00
Heath, per bunch	50 to 75 cents
Adiantum	1.00@ 1.50
Smilax	25.00@35.00
Asparagus plumosus	50.00@100.00

PHILADELPHIA, May 9.

Roses, Brunners	10.00@35.00
" Lafrays	15.00@30.00
" Beauties	20.00@35.00
" Belles	35.00
" La France, Mermet, Bride	4.00@ 6.00
" Cusin, Watteville	3.00@ 5.00
" Jacqs	8.00@10.00
" Perle, Gontier	2.00@ 3.00
Valley	2.00@ 3.00
Carnations	.75@ 1.25
Daffodils, tulips	3.00@ 4.00
Mignonette	1.00@ 2.00
Asparagus	50.00@75.00
Smilax	20.00@25.00
Adiantum	1.00@ 1.25
Harrisii	5.00@ 8.00
Callas	5.00@ 8.00
Sweet peas	1.00@ 2.00

CHICAGO, May 9.

Roses, Perles, Niphetos Gontier	3.00@ 4.00
" Mermet, La France, Albany	4.00@ 5.00
" Brides, Wootton Bennett	4.00@ 5.00
" Beauties	10.00@15.00
" Jacqs	12.00@18.00
" Hybrids	12.00@18.00
Carnations (short)	.75@ 1.00
" (long)	1.50
" (fancy)	2.00
Callas, Harrisii	10.00
Romans, Valley	3.00
Violets	1.00
Sweet Peas	1.00@ 1.50
Daffodils, tulips	3.00@ 4.00
Smilax	20.00

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., BOSTON, MASS.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St.

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
The finest Roses, Violets and Carnations
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

GEO. MULLEN,
WHOLESALE FLORIST
Florists' Supplies Always in Stock.
7 PARK STREET,
BOSTON, MASS.
Orders by Mail, Telegraph, Telephone or Express promptly filled.

WHOLESALE FLORISTS,
JOBBERS IN . . .
. . FLORISTS' SUPPLIES,
FLORISTS' VASES.
METS, BRIDES, GONTIERS, CARNATIONS, ALWAYS ON HAND.
1 Music Hall Place,
BOSTON, MASS.
HORTICULTURAL AUCTIONEERS. . .

The Seed Trade.

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1895. Applications for membership should be addressed to Wm. Meggatt, chairman membership committee, Wethersfield Conn.

VISITED CHICAGO.—M. Vilmorin, L. L. May, F. Howcroft, W. H. Maule, A. J. Brown.

THE LATEST reports from France and England advise that the continued drought is having an extremely bad effect on the growing crops of all seed stocks.

MR. WILLIAM HENRY MAULE has purchased the corner of 18th and Market streets, Philadelphia, paying $56,000 for same. He will devote the upper stories to his seed offices.

DAYTON, O.—The National Plant Co. has increased its capital stock from $4,000 to $25,000.

CANON CITY, COLO.—E. A. Howard, formerly of Las Vegas, is now engaged in the florist business here, in partnership with R. D. Baker.

KINGSTON, N. Y.—Chas. S. Withington has cut 350,000 violets during the past season, an average of 2,000 a day. He cut 35,000 for Easter.

COATESVILLE, PA.—A. N. Greenfield, formerly with La Roche & Stahl, Philadelphia, has started in business here with three greenhouses, each 18x85.

HUESTED, O.—Spraggins, Yates, & Co. is the name of a florist firm that will locate here and soon erect two 60-foot greenhouses. Mr. Yates comes from Springfield, O.

SHEBOYGAN, WIS.—The Sheboygan Garden Co. has recently been incorporated for the purpose of conducting a florist and nursery business. Capital stock, $20,000; incorporators, Otto Schucht, John H. Platt and Emil O. Schucht.

GALT, ONT.—The Galt Hort. Society has had a meeting and decided to hold the summer exhibition of flowers, plants, fruit, and vegetables August 30 and 31. Further information may be had from the secretary, Mr. E. Lane, this city.

FT. WAYNE, IND.—Mr. D. Honaker, who was recently with Miss Flick, has opened a retail store at 135 Broadway. At his opening April 17th, from 1,500 to 2,000 people were in attendance. W. J. Vesey is adding another house 24x92 to the one already built this spring. This house will be devoted entirely to carnations and chrysanthemums.

SYRACUSE, N. Y.—Mr. A. D. Perry, president of the central New York Horticultural Society, has been appointed assistant superintendent of the fruit and canned goods department at the World's Fair. The members of the Society feel very proud of the honor conferred, as there were over 170 applicants for the position. Mr. Perry is well qualified for the position the experience he has had at the state fair being very valuable to him; every exhibitor may rest assured that his exhibits will have a fair and impartial showing. Mr. Perry has already left for Chicago. Mr. W. Hewson, head, gardener to Mrs. Theodore Dissel, is recovering from a severe attack of pneumonia.

We Grow.....

BULBS

SEGERS & CO., BULB GROWERS,

LISSE near HAARLEM, HOLLAND.

Catalogues will be mailed free upon application if not received.

R. VAN DER SCHOOT & SON,

HILLEGOM, - HOLLAND,

Largest Growers of

HYACINTHS, TULIPS, NARCISSUS,

SPIRÆA, LILIES OF THE VALLEY, ETC.

HEADQUARTERS FOR HIGH GRADE FORCING BULBS.

Wholesale Importers should write us for Prices.

OUR NEW TRADE LIST NOW READY.

C. C. Abel & Company

P. O. Box 920, NEW YORK,

FLORIST'S, NURSERYMEN'S AND SEEDSMEN'S AGENTS,

For the following

WELL KNOWN AND RELIABLE HOUSES,

For whom we solicit your orders:

C. G. VAN TUBERGEN, Jr., Florist and Seedsman, Haarlem, Holland. Choice Dutch Bulbs, Novelties, etc.

PIERRE SEBIRE & SONS, Nurserymen, Ussy, France. Roses, Evergreens, Fruit and Forest stocks.

ERNST RIEMSCHNEIDER, Florist and Seedsman, Altona, Germany. Berlin Lily of the Valley a specialty.

ERNEST RIEMSCHNEIDER, Florist and Seedsman, Altona, Germany. Choice selections of German Flower Seeds. Also of Palms, Grass and Garden Seeds. Best Sugar Beet Seeds a Specialty.

Catalogues (mention which) free on application when received for distribution.
All orders for these houses should be plainly written and addressed to us.

Write for wholesale list.

MICHEL PLANT AND BULB CO.,

ST. LOUIS, MO.

TRY DREER'S GARDEN SEEDS,

Plants, Bulbs & Requisites. They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.

HENRY A. DREER, Philadelphia, Pa.

Some Interesting Bulbs. Good Stuff and Cheap, offered by

LETELLIER & SON,

CAEN, FRANCE.

Quantities to Dispose of	Per 1,000
40,000 Amaryllis lutea	$13.00
20,000 Anemone Chinensis	4.00
35,000 Arum Dracunculus	30.00
300,000 Chionodoxa Luciliæ	4.00
200,000 Chionodoxa Sardensis	4.00
80,000 Chionodoxa Cretensis	5.00
50,000 Cyclamen Hederæfolium	17.00
20,000 Colchicum Apripinæ	8.00
20,000 Colchicum Flora Alba	6.00
10,000 Convallaria Multiflora	8.00
35,000 Fritillaria Armena	7.00
500,000 Galanthus Elwesii	4.00
35,000 Galanthus Imperati	9.00
30,000 Iris Germanica var	14.00
40,000 Lilium Candidum	11.00
38,000 Ornithogalum Arabicum	10.00
20,000 Pancratium Maritimum	14.00
60,000 Scilla Bifolia	4.00
40,000 Tulipa Sylvestris	4.00
20,000 Chionodoxa and Galanthus, extra selected bulbs	6.00

Prices are free on board at Havre.

We offer quotations on all other French specialties.

Palm Seeds—The largest assortment in Europe. Ask for special list. You may direct your orders to

MR. ANDRE L CAUSSE,

19 PARK PLACE, NEW YORK CITY.

BENJAMIN RIMBAUD, BULB GROWER,

Quartier du Temple, Toulon, var, France.

Cable address Benrimbaud, Toulon.

The largest cultures in the South of France, of WHITE ROMAN HYACINTHS, Narcissus Paper White grandiflora, N. Double Roman, N. Double Von Sion, true pure yellow, and other Daffodils. Lilium Candidum, the largest bulbs. Freesias, Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A. Double Rosette the earliest, etc. Prices on application.

LILIUM HARRISII.

Original and largest growers of this important bulb.

OUR SPECIALTY!

True Stock. Lowest Prices. Best Quality.

F. R. PIERSON CO.,

TARRYTOWN-ON-HUDSON, NEW YORK.

FORCING BULBS,

HYACINTHS, TULIPS, DAFFODILS,

And all other bulbs for forcing and outdoor, in very fine quality, at reasonable rates.

If any of our friends have not received a copy of our Catalogue of 1893, should write for one at once.

Please ORDER ON RECEIPT of our Catalogue.

SEGERS BROTHERS,

WHOLESALE BULB GROWERS,

LISSE, near Haarlem, **HOLLAND.**

HULSEBOSCH BROS.,

BULB AND PLANT GROWERS,

OVERVEEN, near Haarlem, HOLLAND.

	Per 100	1000
Lilium Harrisii, 4 to 5-inch in circ.	$2.20	$19.00
" " 5 to 7-inch in circ.	3.00	24.00
" " 7 to 9-inch in circ	5.25	47.00
" " 9 to 12-inch in circ.	11.00	100.00
Lilium Longiflorum 10 per cent dearer than Lilium Harrisii.		
Roman Hyacinths, extra selected	2.50	22.00
" " top roots	3.00	25.00
Narcis. Totus Albus, extra selected	1.00	7.50
" " " Grandiflor'm, ext s'le'd	1.30	11.00

Fall Wholesale Catalogue now ready. Address

A. HULSEBOSCH,

P. O. Box 311B. Warehouse 58 West Street,

NEW YORK CITY.

DUTCH BULBS.

HYACINTHS, TULIPS, NARCISSUS, ETC. FIRST QUALITY IS THE BEST.

I have gained the reputation of having the finest bulbs of Holland, and if you would have the **VERY BEST** send me a trial order.

Two important items, viz:

Quality the Best. Prices the Lowest.

Price list free on application.

JOHN BARTH BOS,

Bulb grower. Established 1868.

Overveen near Haarlem, Holland.

Lily of the Valley Bulbs.

THE STAR BRAND

SPECIALLY RECOMMENDED FOR LATE FORCING.

We are now booking Import orders for shipment from Hamburg in October or November.

REISS & BRADY,

280 Washington Street, New York.

TUBEROSES.

☞We are headquarters.	Per 100.	Per 1,000
1st size Dwarf Pearl	$1 50	$12 00
2d size "	80	6 50
1st size Tall Pearl	1 20	10 00
Gladioli, extra large, finest sorts	1 25	12 00

H. G. FAUST & CO.,

64 and 66 N. Front St., PHILADELPHIA, PA.

WOODLAWN FARMS, 1,300 ACRES.

BULBS FOR 1893 FOR FORCING.

HYACINTHS, TULIPS AND CROCUS

Mr. Lomans makes the following special offers—**Our Selection.**

Lot 1.—70,000 bulbs for . . . . . $850.00 Lot 3.—7,000 bulbs for . . . . . $ 86.00
Lot 2.—14,000 bulbs for . . . . . 170.00 Lot 4.—3,500 bulbs for 44.00
Lot 5.—1,750 bulbs for . . . . . $23.00.

Prices are F. O. B. Haarlem, Holland. Add 15 per cent. to above prices if delivered from New York.

Lists upon application, Address all orders to—

SEEDS H. A. DAACKE BULBS

410 W. Fourteenth St. NEW YORK.

GT. VAN WAVEREN & KRUYFF,

—Special Growers of—

Dutch Bulbs & Flower Roots.

Mr. Gerard Kruyff has come personally to make a trip through the United States, to contract with buyers, and offers a large stock of first quality goods. Parties interested in the Bulb trade are requested to correspond. Send lists for estimates to

Gerard Kruyff,

ASHLAND HOUSE, FOURTH AVE., NEW YORK CITY.

We Sell Bulbs!

Special Prices on Application.

Weeber & Don

Seed Merchants and Growers.

114 Chambers St., NEW YORK.

Fresh From Japan.

Sound Bulbs of

Lil. Auratum, 7 to 9 inch, $9.00 per 100.
Lil. Rubrum, 7 to 9 inch, $9.00 per 100.

Import prices on first class Fall Bulbs way down.

W. W. BARNARD & CO.,

6 and 8 N. Clark St. CHICAGO.

BULBS

We are now booking orders for fall delivery.

Send us a list of your wants and let us make prices.

WISCONSIN FLOWER EXCHANGE,

131 MASON STREET,

MILWAUKEE, WIS.

G. J. MOFFATT,

Manufacturer of

PAPER BAGS AND ENVELOPES

Special attention given to

Seed Bags and Catalogue Envelopes.

NEW HAVEN, CONN.

St. Louis.

The weather still continues remarkably cool, so much so in fact, that planting has been delayed until the greenhouses are full to overflowing. Many plants that should have been cleared away a month ago are still on hand, and the stock grown on to replace it is suffering for want of room. A trip among the greenhouses reveals this to be the case almost everywhere. Those doing a shipping trade are slightly better off, but are also complaining about the demand. Many seem to think it is on account of the World's Fair, and the number of people going to Chicago, and that if gardens are not made and beds planted early in the season, they will not be planted at all. I don't think that this will cut much figure however. As soon as the warm weather comes all will have the planting fever as usual, and will make up for lost time.

Although the plant men have been grumbling, the cut flower growers seem well satisfied with the prevailing temperature. It has shut off the usual increase in the supply, and has kept prices more uniform.

On May 6 the regular monthly meeting of the Florists' Club was held, with a very poor attendance. The premiums to be offered by the Shaw estate at the annual fall show were submitted by the director of the Gardens, and were accepted by the Club. There are some changes from the list of last year, one being for the "Best 24 blooming plants for home culture," not to contain more than three plants of any species, nor more than two of any one kind. Another being for "Best twelve cannas." Last year there was one for "Best canna," and those shown were so attractive that both the number called for, and the prizes offered have been increased. A third brings Cocos Weddeliana, Asparagus plumosus nanus, and ferns into competition for honors as a center piece for table decoration. The list all through was very good. A provision has been made whereby sufficient money will be left of the amount appropriated, to secure the moulds for casting a medal to be used in the future as may be deemed advisable. It will consist of a relief of Henry Shaw on one side, and the other to be engraved as occasion may require. The understanding is that it will be awarded to new and meritorious plants, the exhibitors of which as a rule it is thought would prefer a medal to a cash prize of the same value.

A scheme for making all exhibitors fill up their entries is to be tried. It consists in having the exhibitor agree to forfeit 20 per cent. of the amount of all first prizes for which he enters but does not compete. The working of this rule will be watched with interest by all.

R. F. T.

WHEN writing our advertisers please use one of your printed business letter heads or enclose your business card.

ROSES,
CARNATIONS AND VIOLETS,
STRONG PLANTS,
WRITE FOR PRICES.
Kemble Floral Co.,
OSKALOOSA, IOWA.

FARFUGIUM GRANDE.
First-class plants. Price $8.00 per 100; $1.25 per dozen, by mail. Postage prepaid.
TILTON BROTHERS, 222 Grove St., Aurora, Ill.

CUTTINGS
Carnations- Lizzie McGowan, Grace Darling and Aurora.
French Canna—A fine assortment of the best varieties only at $1.50 per 100, or $35.00 per 1000.
Pansies—Small blooming plants $1.75 per 100, or $15.00 per 1,000. Magnificent strain.
Terms Cash. Correspondence Solicited.
ALBERT M. HERR, Lock Box 496, Lancaster, Pa.

Carnations All Sold
We still have some Fine Plants of
The Best Yellow Canna. NELLIE BOWDEN, 75c each. $8.00 per dozen
JOHN McGOWAN, - - Orange, N. J.

AQUATIC NOVELTIES FOR 1893.
See our illustrated catalogue containing handsome lithograph of new Pink Pond Lily (Nymphæa Odorata Caroliniana), one of the choicest in cultivation. A complete collection of all the hardy and tropical varieties in cultivation. Catalogue and prices free on application.
WM. TRICKER, Dongan Hills, S. I., N. Y.

Cyclamens.

	Doz.	Hundred.
Select strains, In 3½-in pots	$1.00	$8.00
H. P. Roses, Select named kinds	1.50	10.00
Smilax, stocky, well-hardened Seedlings, per thousand,	6.00	.75

F. A. BALLER,
BLOOMINGTON, ILL.

COLEUS.
Standard Sorts, $2 25 per 100; $20 per 1000.
My Specialty: Golden Bedder and Verschaffeltie, $2.50 per 100; $22.50 per 1,000; 2½ inch pots; ready now. Any quantity. Cash with order.
C. F. FAIRFIELD.
SPRINGFIELD, MASS.

GERANIUMS.
Fine plants and varieties, 4 inch pots, per 100, $7 50.
Tuberous Begonias, per 100, $3 00 and $2.50. Should be ordered now.
BRAUER & RICHTER,
McCONNELSVILLE, OHIO.

CATALOGUE PRINTING.
ELECTROTYPING.
Done with expert ability for Florists, Nurserymen, Seedsmen. Write to
J. Horace McFarland Co.,
HARRISBURG, PA.

STRING
Your Smilax and other trailing plants with
GREEN SILKALINE.
Same cord can be used with plants when decorating. For samples and prices, address
JOHN C. MEYER & CO.,
289 Devonshire Street, BOSTON, MASS.

Mexican Primroses (Enothera Rosea).
Fine plants, per 100, Apple Blossom, $3.00; Hermosa tinted, $5.00; Cooperia Pedunculata, 1st size, $3.00; 2nd size, $2.50; Cooperia Drummondii (ready in May) $1.50; Zephyranthes Andersonii Texana (May), $1.50; Crinum Zeylanicum, C. Careyanum, C. Sanderianum, C. Latifolium, $2.00 each, $20.00 dozen.
Carriage paid when cash accompanies order.
MISS LIZZIE FREEMAN,
1203 East Ave., AUSTIN, TEXAS.

CARNATION CUTTINGS.
Healthy stock, well rooted, ready to ship now.
Hinze's White, per 100, $1.25; per 1000, $10.00
Grace Wilder, " " 1.50; " 12.50
W. F. Dreer, " " 2.50;
THOMAS DeWITT,
(Successor to DeWitt Bros.) BRISTOL, PA.

Always mention the American Florist when writing to advertisers.

STRONG PLANTS OF CARNATIONS.
Fine stock, ready now. Special prices on large lots. Terms, cash with order.

	Per 100	Rooted Cutings	Strong Plants
Daybreak, flesh pink		$ 3.00	$ 6.00
Tidal Wave, carmine		2.00	4.00
Grace Wilder, bright pink		1.50	4.00
Silver Spray, white		2.00	4.00
Hector, scarlet		2.00	4.00
Buttercup, good yellow		4.00	6.00
Lizzie McGowan, white		2.00	4.00
Crimson Coronet		3.00	6.00
J. J. Harrison, variegated		2.00	4.00
Ferdinand Mangold, crimson		3.00	6.00
Golden Triumph, light yellow		4.00	6.00
Fred Dorner, scarlet		3.00	6.00
Nellie Lewis, variegated		2.00	4.00
Portia, scarlet		1.50	3.00
Ben Hur, clear pink		4.00	6.00
White Dove, pure white		3.00	5.00
Nancy Hanks, clear pink		4.00	6.00
Aurora, bright pink		3.00	6.00
Prest. Garfield, scarlet		1.50	4.00
Emily Pierson, scarlet		4.00	6.00
Peachblow Coronet, blotched		3.00	5.00
Puritan, white		3.00	5.00
Wm. Scott, clear pink		10.00	15.00
Mad. Albertini, light pink		10.00	15.00
Mrs. E. Reynolds, bright pink		10.00	15.00
Richmond, brilliant carmine		10.00	15.00
Blanche, white		10.00	15.00
Edna Craig, clear pink		12.00	15.00
New Jersey, scarlet		12.00	15.00
Ida McKinley, salmon pink		10.00	12.00

GEORGE HANCOCK, Grand Haven, Mich.

W. R. SHELMIRE,
Carnation Grower
AVONDALE, CHESTER CO., PA.
Send for price list of Rooted Cuttings.

CARNATIONS
ROOTED CUTTINGS
of all the leading varieties. Will be ready January 1, 1893.
R. T. LOMBARD, Wayland, Mass.

GRACE BATTLES
and over 60 other varieties of
CARNATIONS
offered the Wholesale Trade.
My list embraces the best Standard and New kinds, including some of particular interest to growers of seedlings. Correspondence and personal inspection solicited. C. J. PENNOCK,
The Pines, Kennett Square, Chester Co., Pa

ROOTED CUTTINGS of CARNATIONS
By the Wholesale.
Ready now. This is the best time for intending buyers to supply themselves. offer them at moderate prices. Send for Price List. Address
JOSEPH RENARD, Unionville, Chester Co., Pa.

ROOTED CUTTINGS
Of the Best Old and Most Promising new varieties of
CARNATIONS.
Write for a catalogue and send list of wants for an estimate.
J. J. Styer,
CONCORDVILLE, PA

BULBS. ✻ BULBS. ✻ BULBS.

AURATUM, RUBRUM, ALBUM,

and 33 other Fine Varieties of

JAPAN BULBS

For Fall delivery, 1893. Give no order before having well studied our new list.

Best Goods. Sound Delivery Guaranteed.

Fifteen Years Experience.

H. H. BERGER & CO., SAN FRANCISCO, CAL.

ROOTED CUTTINGS.

Alternanthera, Versicolor, Tricolor and Aurea Nana	per 100	.50
Alternanthera Paronychioides	"	.75
Coleus, best old and new	"	$1.00

PLANTS.

Fuchsia Trailing Queen	per doz.	.50
Begonia assorted	per 100	$1.00
Mexican Primroses, 3 varieties	"	3.00
Fuchsia, best varieties	"	3.00
" Storm King and Phenomenal	"	4.00
Echeveria Glauca	"	3 & 4.00
" Extensa Globosa, for centers, plants six inches across	each	.25

Price List on Application

ROBT. S. BROWN & SONS,

Box 99, Kansas City, Mo.

---

* Rooted Cuttings. *

COLEUS FOR YOU ALL!

Golden Bedder and Crimson Verschaffeltii specialties, $6.00 per 1000. Fuchsias, Storm King, Moles Worth, E. G. Hill, Phenomenal, Jupiter, Black Prince, and others, $1.00 per 100. Ageratums, dwarf, blue and white, 75c per 100. Heliotrope, 4 sorts, $1.00 per 100. Few fine Standard Dwarf, $1.00 per 100, from flats $1.50. Pansies, Hybrid, Butterfly and Trimardeau, seed bed, 40c per 100; transplanted, 60c per hundred.

CASH WITH ORDER.

J. E. FELTHOUSEN,

SCHENECTADY, N. Y.

Tuberous Begonias.

We still have some fine tubers, which to close out we offer at

Single Mixed, per 100, $4.00; **Double Mixed**, per 100, $7.50; **Single Seedlings**, from seed boxes, per 1,000, $15.00; **Single Seedlings**, transplanted, per 1,000, $25.00; **Double Seedlings**, transplanted, per 100, $3.50.

F. J. MEECH & SON,

Charlevoix, Mich.

COLEUS.

Golden Bedders and **Verschaffelti** all sold. Can still supply mixed lots, my selection, $6.50 per 1,000, 90 cts. per 100. But get your order in quick.

ALEX. McBRIDE, Alplaus, N. Y.

GRAPE VINES.

(FOREIGN.)

All the leading varieties for cultivation under glass, in following sizes: Fruiting vines for forcing in pots, 1 year, 2 years, and extra strong. Also **Peaches** and **Nectarines** specially prepared for forcing in pots and tubs. Booked orders stored until May 15th if desired. Prices upon application.

JOHN G. GARDNER.

JOBSTOWN, N. J.

Cycas Revoluta

The Largest and Best Selected Stock of Cycas Revoluta, fronds and roots cut off, true long leaved variety, now on hand.

For general Japanese and Australian stock, apply to

F. GONZALES & CO.,

303-312 Wayne St., SAN FRANCISCO, CAL.

☞ Send for catalogue

Always mention the American Florist when writing to advertisers.

VERBENAS.

In Bud and Bloom. Per 100 P. 1000

Mammoth and general collection, choice assortment, all colors, fine bushy plants	$ 3.00	$25.00

ROSES—Fine healthy stock.

Perles, Mermets, The Bride, Sunset, Papa Gontier, Niphetos, Bon silene, La France, Souv. d'un Ami, Duchess of Albany, Mad. Cusin, Mad. de Watteville	5.00	45.00
Hybrid Perpetual Roses in bud and bloom, from 5 inch pots, strong plants	25.00	
Tea Roses, in bud and bloom, from 4 and 5 inch pots, strong	$10.00	15.00
Geraniums, double and single, fine assortment of varieties from 2½ inch pots	4.00	35.00
From 3½ inch pots	8.00	
Heliotrope, strong bushy plants, 3½ in. pots	6.00	
Vinca, variegated, strong, 1 year old, bushy	10.00	

Lots of other Fine Stock.

Send for new list.

WOOD BROTHERS,

Fishkill, N. Y.

COLEUS, ROOTED,

Leading varieties, **$1** per **100**; **$8** per **1,000**, including the finest yellow Coleus in cultivation; a new variety, equal to Golden Bedder in color, and as good a grower as Verschaffeltii.

—PANSIES—

Fall Seedlings, a splendid strain, **$5** a **1,000**; **500** at 1,000 rates. 10c per 100 extra where shipped by mail.

JAMES HORAN,

FLORIST, BRIDGEPORT, CT.

E. G. HILL & CO.,

Wholesale Florists,

RICHMOND, INDIANA.

MAGNOLIAS

OBOVATA GRACILIS AND PURPUREA.

Fine, bushy plants, 3 to 8 feet, from $25.00 to $200.00 per 100.

Send for descriptive catalogue and wholesale price list free to all in the trade.

SAMUEL C. MOON,

MORRISVILLE, Bucks Co., PA.

ALTERNANTHERA

Three Colors. Rooted Cuttings.

75c per 100; $6.00 per 1,000. From boxes, $1.25 per 100; $10.00 per 1,000. From 2½ inch pots, $2.00 per 100; $18.00 per 1,000. All very strong. Enlalia, 4 inch pots, 6c in quantity. Water Lilies, blue, from seed pans, $1.00 for 12. Address

F. J. ULBRICHT,

ANNISTON, ALA.

NEW BEDDING BEGONIA

THURSTONII.

Strong plants, $1.00 per dozen; $6.00 per hundred.

J. E. BONSALL & SON, 30B Garfield Ave., Salem, O.

FILL UP HOUSES FOR SUMMER.

Fine young plants, potted now, will be worth many times the money by autumn.

ALL EXTRA STRONG.

PALMS. *Per 100*

Latania Borbonica, 2 inch pots	$ 5.00
Cocos Plumosa, or Weddelliana, 2 inch pots	10.00
Cocos Weddelliana, 3 inch pots	20.00
Areca Baueri, 3 inch pots	10.00
Cocos Plumosa and Weddelliana, strong, from seed boxes	5.00
Latania Borbonica, from seed boxes	2.00

ORNAMENTAL FOLIAGE.

Dracæna Terminalis, 2 inch pots	6.00
Dracæna, 20 finest sorts, 2 inch pots	10.00
Dracæna Fragrans or Amabilis, 4 in. pots	15.00
Ornamental Foliage, 25 beautiful varieties, 2 and 3 inch pots	10.00
Crotons, 20 very fine sorts, 3 inch pots	15.00
Caladiums, 20 very fine sorts, 2 inch pots	10.00
Pandanus Utilis, 4 inch pots	25.00
Musa Ensete, 4 inch pots	20.00

FERNS.

Lomaria Gibba, 2 inch pots	6.00
Lomaria Gibba, very fine, 3 inch pots	10.00
Nephrolepis Phillipense; 3 inch pots	8.00
Market sorts, mixed, 10 sorts, 2 inch pots	5.00

JOHN H. LEY,

ANACOSTIA, D. C.

Siebrecht & Wadley,

ROSE HILL NURSERIES,

NEW ROCHELLE, N. Y.

Palms,

ORCHIDS,

Roses,

and New Plants.

FRESH DRACAENA CANES NOW READY.

ORCHIDS.

The Finest Stock in the World.

SANDER'S,

ST. ALBANS,

ENGLAND.

Thirty minutes from London.

Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City.

ROSES, Leading Forcing Sorts.

PELARGONIUM, Fred Dorner, $10.00 per 100.

ALTERNANTHERA, P. Major and A. Nana.

Coleus, Centaurea, Alyssum, Verbenas, Achyranthus, $2.50 per 100.

JOSEPH HEINL, Jacksonville, Ill.

Gladiolus, light shades predominate, $1.00 per 100.
Alternanthera, red and yellow, good stock, $2.75 per 100.
Centaurea Gymnocarpay, good stock, $3.00 p. 100.

McCrea & Cole, Battle Creek, Mich.

Spring Humor.

The Easter awakening has come, and the witty man like the spring crocus has emerged from his winter quarters, and we find him cropping out all over the columns of our contemporaries. Some of his productions will bear repetition. For instance the *Providence Journal* in its Easter article gives us the following:

The gardener, by constant experience, knows the exact temperature at which a fully matured plant will flower, and by keeping the plant in an atmosphere of a lower temperature for some time can so plan to have the plant bloom at a certain time. Many of the callas Mr. Kelly so regulates that they will blossom just three hours before the stated time for church service.

The *New York Times* man is not slow, for in describing the Brooklyn Park and speaking from experience probably he tells us that

The cacti will at once be planted in the flower garden, thus avoiding much unnecessary handling. Three of the largest beds in the garden will be devoted to cacti, which, albeit their hardy appearance, require the most delicate handling.

The *Journal* does up Alderman Morris in this fashion:

"The flowers that bloom in the Spring, tra-la!" Thus warbles ex-Alderman John Morris, as he makes ready for the opening of the Flower Market in Union Square on Tuesday.

"This is going to be the Covent Garden Market of New York," said Mr. Morris, proudly, as he tested the nozzle of a new garden hose and balanced himself upon a pyramid of flower-pots. "The stuffy flower shops will be abandoned and every one will patronize the market. Fifth avenue and the Bowery will alike send here for flowers."

The *Boston Globe* man fell into the hands of a retail florist and this is the result:

"You spoke of the wholesale dealers being pushed for supply. What did you do then, because of course, there were fine ladies who simply would not be refused?"

"I am glad you spoke of that. It reminds me of a peculiar phase of trade. There are in the suburbs of Boston many young men of moderate means who must have a fad. They are men of refinement and culture and so their fad runs to the cultivation of flowers and particularly the forcing of flowers in cold frames through the winter. Violets are thus easily raised and are very satisfactory.

"Now some of these same young men are raising more violets than they could possibly use in any way for their own domestic use, so they are selling them to florists for good market prices. I know one young man who is a music teacher of some prominence in Boston who brings in every day through the season a big valise full of violets, which he has raised himself.

"He has made some days this season as high as $30. He has only a few frames of them, and all the care they get he gives to them in his spare moments at home. He comes in town on a train that gets here about 9:30, and picks them fresh before he comes. They are just as good, as fragrant, as double, and as salable in every way as those that are raised by commercial growers.

"There are many young gentlemen who are making money and having recreation all at the same time. These fellow have helped us out a great deal when the wholesale dealers have failed us. You see, they sell directly to the retail sellers, and have a chance to make a fairly good profit."

Another correspondent has been buying some plants and

To make these trifling purchases quite ornamental, it is only necessary to line a common strawberry basket with tin foil and fill it with good soil, such as any florist will sell you for 10 cents per bushel basket. Strengthen the box with wire, put the plants in it and hang with a slender chain to the chandelier.

Association "Flora"

BOSKOOP, HOLLAND.

Now on hand in New York:
CLEMATIS, 3 Years, per 100, $30.00
H. P. ROSES, for forcing, " 9.00
In the best variety, as Alfred Colomb, Anna de Dieshach, B. Rothschild, Fisher Holmes, Gen. Jack, La France, Mme. G. Luizet, Mme. Plantier, Magna Charta, Paul Neyron, P. C. de Rohan, Merville de Lyon, Perle des Blanches, Ulrich Brunner and other sorts. Azaleas, Rhododendrons, Spiræas, etc. We also have Palms, Dracænas, Araucarias and Bay Trees at our nurseries in Holland. Catalogue on application.

P. OUWERKERK, 206 Cambridge Ave.,
JERSEY CITY, N. J.

The three leading Florist Flowers:
CHRYSANTHEMUMS,
CARNATIONS
AND ROSES.
ALL THE NEW AND SELECTED STANDARD VARIETIES. . . .
My stock of all are as fine as can be produced at reasonable rates.
Complete list of these will be mailed to all applicants in the trade.
JOHN N. MAY, Summit, N. J.

CANNA EXPLORATEUR CRAMPBEL
Flower as large as BOUVIER; color a clear vermilion scarlet, tinted with crimson spots distributed evenly over the petals. Flower spikes large. We claim it to be the largest and most showy deep red flower of all the new Crozy kinds. **Per dozen, $6.00; per 100, $40 00.**
ALPHONSE BOUVIER and J. D. CABOS, per dozen, $4 00.
FLORENCE VAUGHAN, the sensation of the year, each, $2.50.
J. C. VAUGHAN
NEW YORK: 26 BARCLAY STREET.
CHICAGO: P. O. BOX 688.

Established Orchids.

CATTLEYA TRIANÆ, fine selected stock, well established in 6 inch pots, and will produce four to eight flowers each next winter. Many of them are very choice varieties. Single plants, $2.50, twelve for $25, one hundred for $175. **CATT. GASKELLIANA,** extra well furnished plants in fine condition, and will produce in June next 6 to 10 flowers each. Single plants, $2.50, twelve for $25. **CATT. MOSSIÆ,** the finest cattleya for color and size yet introduced. Splendid plants, well furnished with flower sheaths and will produce 6 to 10 flowers each plant in May. $3 each or $30 per dozen. A large consignment of **EAST INDIAN ORCHIDS** will shortly arrive. Among them will be a grand lot of **Cypripedium Insigne,** collected in the original district from which all the choicest varieties have come. Also **Dendrobium Nobile, Dendrobium Farmeri, Dendrobium Chrysotoxum, Dendrobium Thrysiflorum, Dendrobium Aureum, Dendrobium Densiflorum, Dendrobium Devonianum, Dendrobium Cambridgeanum** and other choice species. Particulars later.
IG. FORSTERMAN, NEWTOWN, N. Y.

HOW TO GROW CUT FLOWERS.

A PRACTICAL TREATISE ON
THE CULTIVATION OF THE ROSE,
And Other Flowering Plants for **Cut Flowers,** sent to any address upon receipt of $2.00. M. A. HUNT, Terre Haute, Ind.

Rooted Cuttings of Evergreens, Hardy Flowering Shrubs and Hardy Perennials (Achiilea, iberis, etc.) raised on contract for spring delivery. SEND LIST OF WANTS.
. . . ISAAC C. ROGERS, MOORESTOWN, N. J.

NEW AND GRAND
CHRYSANTHEMUMS.
For 1893.
Japanese Novelties and California Seedlings.
Monarch of Ostrich Plumes, Chrome yellow shaded amber, hairy. **Empress of Russia,** snow white, hairy. **Master of Ostrich Plumes,** maroon, reverse gold, hairy. **Fairy Queen,** a delicate pink, hairy. **Princess of Japan, The World,** etc. Send for catalogue.
JAPANESE NURSERY,
H. YOSHIKE, Prop.
Cor. 16th & Willow Sts. OAKLAND, CAL.

25,000 PANSIES The Jennings strain; extra fine plants in bud and bloom, **$2.00 per 100.** Medium size plants, will flower soon, **$1.00 per 100; $9 00 per 1,000.** Fine clumps Snow Flake Daisies in bloom, **$2.00 per 100,** by express only. Pansy Seed **$1.00** per package.
E. B. JENNINGS, PANSY GROWER.
Lock Box 251. SOUTHPORT, CONN.

CUTS!

Wood Engraving,
Zinc Etching,
Half-Tone,
Wax Engraving, Photo-Engraving,
Designing.
MANZ & CO., ENGRAVERS.
183 Monroe Street, CHICAGO.

DO YOU WANT ANY?

	Per 100.	Per 1000.
Ivies English, one year old	$5 00	$40 00
Alternantheras, red or yellow	3 00	25 00
Echeveria Glauca, 2-2½-inch diam	3 00	25 00
Daisies, hardy red or white	3 00	25 00
Pansies, strong plants, good strain	3 00	25 00
Coleus, rooted Golden bedder and Verschaffeltii	1 00	7 50

Sweet Pea seed, our own growing, finest varieties mixed 65c. per pound. (Cash must accompany all orders.)
JOHN RECK, Bridgeport, Conn.

"CHRYS-COLA"

Rooted Coleus.

Verschaffeltii, Golden Verschaffeltii, Hero, Yeddo, Golden Bedder, Chapmani, Firecrest, J. Goode, Chicago Bedder,

75c per 100; $6.00 per 1,000.

Cash with order.

Rooted Chrysanthemums.

$1.75 per 100; $15.00 per 1 000.

Send for list of varieties.

Geraniums & Fuchsias.

I have for sale for immediate delivery, all my stock plants of Geraniums and Fuchsias; over forty of the best varieties, all in excellent shape. Will be sold at a bargain to party wanting the entire stock.

S. B. FIELD,

ROSELLE, N. J.

MOON VINES, Extra strong plants, **$2.50 per 100.**

COLEUS, Extra strong plants, **$1.75 per 100.**

ALTERNANTHERAS, P. Major and A. Nana, Extra good plants, **$2.00 per 100.**

HEITE FLORAL CO.

712 Linwood Ave, KANSAS CITY, MO.

CANNAS.

Mixed Varieties, dry roots, $3.00 per 100; $20.00 per 1,000.

HYDRANGEAS.

The Largest and Best Stock in the West.

RED BRANCHED, HORTENSIS and OTAKSA.

From 3 inch to 12 inch pots. Crowded for room and will sell reasonable.

JOHN C. URE,

ARGYLE PARK, ILL.

CHRYSANTHEMUMS.

2½ Inch, $4.00 per 100.

Address **J. G. Burrow,**

FISHKILL, N. Y.

WELL ROOTED CUTTINGS.

Lamborn, Wilder, Portia, Spray, Mrs. Mangold, Garfield, ready to plant out doors, $1.00 per 100. Coleus, Stevia, Alternanthera, Tradesc. Zebrina, Violets, Lobelia, Vines, Fuchsias, Chrysanthemums, Paris Daisy, Cala. Pink, Feverfew, Double Petunia, Pelargoniums, Mdme. Salleroi—Rose, Bridal Wreath, L'Elegante, Ivy folge Geraniums, etc., $1.00 per 100. Also plants in pots.

Denver City Nurseries, South Denver, Col.

How Are You, Snow Crest?

CUT BLOOMS 50 CENTS PER HUNDRED.

Well, they say we are the best,
For all who see us like us,
And so far we've stood every test
Or otherwise they'd like us.
We will come your plant to grace
For seventy cents per dozen
Send order now to Gibson's place.
We'll come next day a buzzin'.

50,000 new ready strong rooted cuttings, $2.00 per 100. Full budded and blooming for immediate sales and bedding out. Strong and stocky, $4.00 per 100; $35.00 per 1,000; 500 at 1,000 rates.

Florists double white forcing petunias, small plants, $3.00 per 100.

Gibson's hybrid pansy, small plants 50c per dozen.

Golden Marguerites, Gem Feverfew, Lobelia, trailing and dwarf, and mixed vase and bedding plants, rooted, $1.00 small plants, $2.00 per 100. Vincas from flats $2.00 per 100. Eulalia, China and Japonica 4 inch size, $3.00. 5 and 6 $5.00 per 100. Satisfaction guaranteed or money refunded.

Address, cash with order please

J. C. GIBSON, Woodbury, N. J.

20,000 VERBENAS.

THE CHOICEST VARIETIES IN CULTIVATION.

Fine pot plants, $2.50 per 100; $20 00 per 1000

NO RUST OR MILDEW.

Packed light, and satisfaction guaranteed. Send for circular. . . .

Our sales reached nearly 250,000 last year, and we can assure our customers that our plants are fully equal, and assortment of varieties surpass those of last year.

J. L. DILLON, Bloomsburg, Pa.

ROSES AND CARNATIONS.

The Largest and Finest Stock in the Northwest ever offered at the following prices:

ROSES—Perles, Hoste, Sunset, La France, Mermet, Bride, C. Soupert, Niphetos, from 2½-inch pots, $4.00 per 100
Mme. Watteville, Albany, Pierre Guillot, Meteor, from 2½-inch pots ..... 5.00 per 100
American Beauty, from 2½-inch pots ..... 7.00 per 100

CARNATIONS—Silver Spray, Lizzie McGowan, Hinze's White, Hector, Portia, Garfield, Grace Wilder, Fred. Creighton, Mrs. E. G. Hill, from 2-inch pots ..... 3.00 per 100
Rooted Cuttings of all varieties offered ..... 2.00 per 100

Cut Flowers, Roses, Carnations Lilium Harrisii and Smilax at lowest market prices. Telegraph orders promptly attended to. CHRIST HANSEN, Wholesale Florist ST. PAUL, MINN.

WORLD'S FAIR ACCOMMODATIONS

Members of the trade visiting Chicago during the World's Fair can find good, clean lodgings within short distance of World's Fair entrance at one dollar per day. Address manager

CHICAGO CUT FLOWER EXCHANGE

45 LAKE STREET.

ROOTED CUTTINGS—Good Ones.

Verbenas, 22 varieties, ...per 1000, $8.00, per 100, $ .90
Coleus, 12 varieties ..... " 1.00
Manetta Vine and Mexican Primrose..... " .25

I. L. PILLSBURY, Macomb, Ill.

AMPELOPSIS VEITCHII.

Nice seedling stuff, out of 2-inch pots, $3.00 per 100; $25.00 per 1000.

WILL EXCHANGE FOR SOME CARNATIONS.

Amaryllis Johnsonii, out of 3-in. pots, $1.00 per doz.

JOHN A. BALMER, Vincennes, Ind.

VERBENA SEEDLINGS,

PHLOX, MARGUERITE CARNATIONS.

If you need any of these it will pay you to write to

W. J. ENGLE, Box 211, Dayton, O.

Low Retail Prices.

The florists' world, so far as Cleveland is concerned at least, has been somewhat torn up of late.

A certain prominent florist has departed rather widely from his past teachings to others of the craft. Hitherto he has been, or has claimed to be, a staunch up-holder of prices and has not failed to preach the gospel of good rates to all who would hearken to his words. Now, however, the gentleman has changed his ideas with a vengeance and has leaped to the other extreme with a suddenness and agility that would discount the efforts of the most acrobatic flea in existence.

There is still some doubt as to the exact complexion of the party in the wood pile.

Some say that it is an attempt to punish certain parties who have incurred the ill-will of the present practicer of "Cheap John" tactics. Others say that it is the result of overproduction on his part. Whatever the motive, there can be no doubt that the party's recent practices and past professions are decidedly inconsistent.

Heretofore he has always posed as a sort of modern Moses who desired to lead the floricultural Israelites out of their financial bondage into a goodly land where the natives were tumbling over each other in their mad scramble for roses at five dollars a dozen or thereabouts. Now he seems to think that he has been a dismal failure in that direction and has started off at a great rate into the wild and utterly desolate fifty cent a dozen country. And as the aforesaid Israelites tag wearily after him, the column of smoke by day smells strongly of sulphur, while the pillar of fire by night burns decidedly blue.

It seems as though the hungry and thirsty wanderers are justified in their wrath. What does any sane man think of retailing roses over the counter at fifty cents per dozen—many of them varieties for which he charges his wholesale customers a greater price by the hundred. Daffodils go at twenty-five cents per dozen. How is that for high—or rather low? Carnations also twenty-five cents for twelve. There can be no doubt of his conversion from his former belief, for a large sign in the window advertises the fact that his place is "Headquarters for cheap flowers." Truly there has been a regeneration! Or else he has never been sincere in his utterances to other florists.

Seriously though, while it is in general true that a man has the right to manage his business as best pleases him, is it right to cut prices to such a ruinous rate as this? The public understands almost nothing of the exigencies of the florists' business. If they can buy roses in April at fifty cents a dozen, by what right does the florist rob them of from two to five dollars for a poorer article in December?

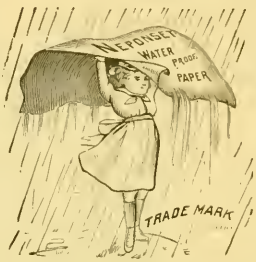
That is how such acts as this in question cause the public to reason. If the florist doing a wholesale and retail business retails roses at fifty cents a dozen, what right has he to charge the wholesale buyer from four to ten dollars per hundred? Will not those who buy to sell over again reason in this way?

It seems to me that possibly some benefit to the trade might arise from a thorough discussion of this subject through the columns of the FLORIST. A. H. G.

INDEPENDENCE, KANS.—On May 5 hail broke 1,500 lights of glass on the greenhouses of W. H. Barnes. The west sides of the houses suffered most. Mr. Barnes reports "ventilation good" and a "smashing business."

NEPONSET FLOWER POTS

of Waterproof Paper, light, durable, unbreakable and cheap.



Tomato Growers have used them with success and proved their appreciation by repeated orders.
Cabbage Growers have tried them and duplicated their orders.
Market Growers of Verbenas, Alyssum, Coleus and other plants, which do not shun moisture, have used them extensively in repeated seasons
Recommended for light and safe packing of tender and valuable plants, for the marketing of Ferns, Dutch Bulbs, Lily of the valley and the like.
Cost about 40 per cent less than earthen pots, and weight considerably lighter, thus saving in first cost and freight.

For Price List and further particulars address

Wholesale Agents:
AUGUST ROLKER & SONS, Station E, New York.
R. & J. FARQUHAR, - - - - Boston, Mass.

Who furnish samples, by mail, postpaid, on receipt of

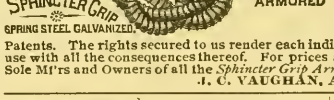
	10 cts.	11 cts.	14 cts.	17 cts.	22 cts.	40 cts.	60 cts.
For 1 dozen	2¼-in.	2½-in.	3-in.	3½-in.	4-in.	5-in.	6-inch pots.

F. W. BIRD & SONS, Sole Manufacturers, EAST WALPOLE, MASS.

GOODYEAR RUBBER CO.

ALL KINDS RUBBER GOODS.

We make a **SPECIALTY** in **GARDEN HOSE** in both Rubber and Cotton.
A GREAT VARIETY OF HOSE REELS, SPRAY PIPES, SPRINKLERS, ETC.
141 Lake Street, CHICAGO.



Pat. 1882, '85, '86, '88, '90, '91.

FOR WATER, AIR, STEAM, ACIDS, OILS, LIQUORS, GAS, SUCTION,
And for any and every purpose for which a hose can be applied.
Sizes, ⅛-inch to 42 inches diameter.
The making, vending or use of any Serviceable Armored Wire Bound Hose not of our manufacture is an infringement on one or more of our Patents. The rights secured to us render each individual dealer or user responsible for such unlawful use with all the consequences thereof. For prices and discounts address **WATERBURY RUBBER CO.,** Sole Mf'rs and Owners of all the *Sphincter Grip Armored Hose Patents,* 49 Warren Street, New York.
J. C. VAUGHAN, Agent, CHICAGO.

W. C. KRICK'S

PATENT
Florists' Letters, Etc.
Highest Award wherever exhibited.

These Letters are made of the best immortelles, wired on wood or metal frames having holes drilled in them to insert toothpicks, by which to fasten them in the design. All infringements prosecuted.

2-inch Letters, $3 00 per 100.
Postage, 15c. per 100.

Before purchasing send for free sample and Catalogue and compare with any other letter in the market.

W. C. KRICK, 1287 Broadway, BROOKLYN, N. Y.

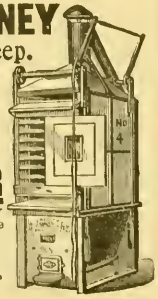
Agents:—J. C. VAUGHAN, Chicago, Ill.; H. BAYERSDORFER & Co., Phila., Pa.; N. STEFFENS, N. Y.; AUG. ROLKER & SONS, N. Y.; ED. S. SCHMID, Washington, D. C.; JAMES VICK'S SONS, Rochester, N. Y.; T. W. WOOD & SONS, Richmond, Va.; J. A. SIMMERS, Toronto, Ont.

BOSTON FLORIST LETTER CO.,

13 Green Street, BOSTON, MASS.
Address all correspondence to 1 Music Hall Place.
Manufacture THE BEST LETTERS IN THE MARKET.
Sizes 1½-inch and 2-inch, $2 00 per 100. Patent fastener with each letter.
With orders for 500 letters we give away a nicely stained and varnished box. See cut in next week's American Florist.

Our letter is handled by all the wholesalers in Boston.
AGENTS: Marschuetz & Co., 23 N. 4th St., Philadelphia, Pa.; A. Rolker & Sons, New York; F. E. McAllister, 22 Dey St., N. Y.; E. Kaufman, Philadelphia; H. Bayersdorfer & Co., Philadelphia, Pa.; A. D. Perry & Co., 33 Warren St., Syracuse, N. Y.; A. C. Kendal, 116 Ontario St., Cleveland, O.; E. H. Hunt, 76 Lake St., Chicago; Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.; H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O.; T. W. Wood & Sons, 6th and Marshall Sts., Richmond, Va.; Jas. Vick's Sons, Rochester, N. Y.; Dan'l B. Long, Buffalo, N. Y.; C. A. Kuehn, St. Louis.
J. A. Simmers, Toronto, Ont., Agt. for Canada.

MAKE MONEY
While You Sleep.



STAHL'S EXCELSIOR FRUIT DRIER

Evaporates Fruit DAY and NIGHT. Catalogue free upon application.
Address
WILLIAM STAHL
EVAPORATOR COMP'Y,
QUINCY, ILL.

LITTLE'S ANTIPEST.

— A —
Valuable Discovery of the 19th Century.
SILVER MEDAL AWARDED
— BY THE —
CALIFORNIA STATE FAIR OF 1890.

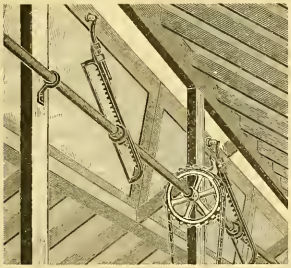
This preparation is a sure destroyer of the **Scale, Wooly Aphis** and **Insect Pests** of any and all descriptions. It may be as freely used in the conservatory, garden and greenhouse as in the orchard or vineyard. It is non-poisonous and harmless to vegetation when diluted and used according to directions. It mixes instantly with cold water in any proportion. It is **Safe, Sure** and **Cheap.** No fruit grower or florist should be without it.

Send for Circulars and Price List.

R. W. CARMAN, General Agent,
291 AMITY STREET,
FLUSHING, Queens, Co., N. Y.

SEE HERE BROTHER FLORIST!

Arn't you tired going through your houses two o three times a day year after year and lifting your ven tilating sash one at a time and propping them up with sticks or pots, with a chance of having sash blown off and broken glass to pay for? If you are



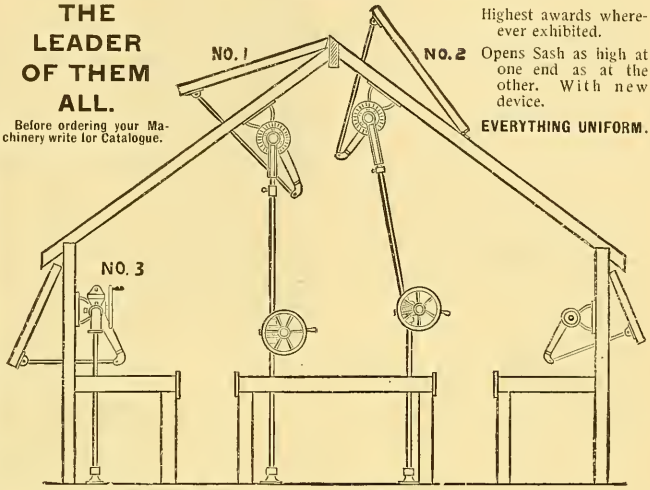
We have got just the thing you need, the **Newest** and **Best** thing out. "The New Departure" for **about half** the cost of the old style. Send for Descriptive Catalogue to

J. D. CARMODY, Evansville, Ind.

STANDARD VENTILATING MACHINERY,

THE LEADER OF THEM ALL.

Before ordering your Machinery write for Catalogue.



Highest awards wherever exhibited.

Opens Sash as high at one end as at the other. With new device.

EVERYTHING UNIFORM.

E. HIPPARD, YOUNGSTOWN, OHIO.

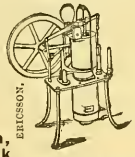
WATER

For Your GREEN HOUSE, ROSE HOUSE, NURSERY,

Conservatory, Lawn, House, Garden, Stock or any other purpose.

Send for Illustrated Catalogue OF THE

DE LAMATER-RIDER AND DE LAMATER-ERICSSON PUMPING ENGINE.



HOT-AIR PUMPING ENGINE.

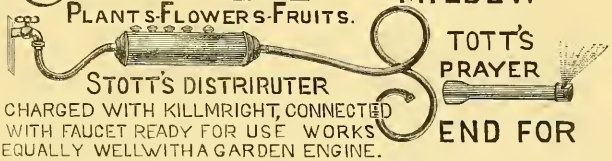
Their operation is so simple and safe that a child can run them. They will pump water from shallow streams or any kind of well. They can be arranged for any kind of fuel. Capacity 1,500 to 30,000 gallons of water a day, according to size.

The De Lamater Iron Works,
87 South Fifth Avenue,
NEW YORK, N. Y.

STOTT'S KILLMRIGHT

STOTT'S SYSTEM OF SPRAYING SAVES PLANTS-FLOWERS-FRUITS.

KILLS, INSECTS AND MILDEW



CHARGED WITH KILLMRIGHT, CONNECTED WITH FAUCET READY FOR USE WORKS EQUALLY WELL WITH A GARDEN ENGINE.

CELL "A" CONTAINS THE KILLMRIGHT

END FOR CIRCULAR AND TESTIMONIALS.

STOTT GARDEN IMPLEMENT COMPANY
136 LIBERTY ST. NEW YORK.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

Clear Cypress, from bottom gutter up is my specialty.

Lyman Felheim, ERIE, PA.

FLORISTS' HOSE

Made by E. W. Holt, member of the Society of American Florists.

SPECIAL OFFER ON ORDERS UNTIL MAY 15, 1893.
15 per cent—on the following—15 per cent.

¾-inch 3 ply Standard, 12c per foot. ¾-inch 3 ply XX 15c per foot. 4 ply 16c per foot. 4 ply XX 20c per foot. ½-inch hose 20 per cent less than above prices. 1-inch hose 20 per cent more than above prices.

SPECIAL—Armored Hose, ¾-inches, 12 and 15c net.

GOODYEAR RUBBER CO.
2 W. 14TH ST., NEW YORK.

FLORAL DESIGNS
The Cut Flower Worker's friend. Fine book of 160 pages. Send $3.50 for it, to
J. HORACE McFARLAND, Harrisburg, Pa.

THE PERFECT DRAINAGE
BENCH TILE
For circulars, etc., address
W. P. Wight, Upland Green Houses,
Send your business card. MADISON, N. J.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

Baltimore.

The markets are really shows of spring flowers just now, where the gaudy reds of geraniums and verbenas are set off by the nodding heads of white hydrangeas, while an occasional block of purple and yellow pansies, or pink and white daisies, draw the admiring glance of the most careless passer by.

The season is about over for nurserymen, trees being well out in leaf, and all but the very latest shrubs in the same condition, but for the florist who grows plants it is only just fairly begun. It is to be hoped the flurry in financial circles will not re-act upon the trade. How we are all bound together! Stocks cannot rise or fall in New York without making moneyed men more or less liberal in their estimates for home expenditures, and causing flush or hard times with the flower man.

Flowers are holding out in quality very well, but prices are drooping. Good carnations bring one cent, La France six to seven, Jacqueminots eight, lilacs are plentiful at five cents for a large bunch retail, and the rule for other flowers seems to be, get what you can rather than ask any fixed price. MACK.

Patents Recently Granted.

Flower pot support, John H. Smith, Hazleton, Pa.; Flower holder, Andrew Snow, Jr., New Bedford, Mass.; Grafting knife, Wm. Wiltse, Jr., Gilboa, N. Y.; Lawn rake, Lewis Gibbs, Canton, O.; Appliance for teaching botany, Wm. H. Gibson, Washington, Conn.; Insecticide, Jos. Brown, Mt. Clements, Mich.; Compound for protecting trees, etc., Silas M. Brooks, Burlington, Conn.

GET THE STATE STRAIGHT!

Needed by every Florist, Market Gardener, owner of Lawn, owner of Grass Plat and Flower Bed, in fact, by every one who has a faucet and hose. The Union Hose Connection (patent applied for) for applying manure, fungicides and insecticides to plants. Feed your plants, fertilize your lawns by using liquid manure. A durable device, simple, scientific and practical. No bad odor, no ugly appearance, healthy plants, vivid lawns. Sent by mail prepaid for $2.50. Send for circular. Address Hose Connection Co., Kingston, Rhode Island. Only 32 Kingstons in the U. S. Get the State Straight.

THE BEST POTS.
THE CHEAPEST.
THE LOWEST FREIGHT RATES.
THE BEST OF PACKING.
THE LARGEST POTTERY IN THE STATE FOR MAKING STANDARD FLOWER POTS.

PRICE LIST OF POTS.

	Per 100		Per 100
2 Inch	$3.25	6 Inch	$2.20
2½ "	3.50	7 "	3.50
2½ "	4.00	8 "	5.00
3 "	5.00	9 "	7.50
3½ "	7.25	10 "	10.00
4 "	9.00	11 "	15.00
5 "	13.80	12 "	20.00

Terms: Cash, free on board cars here. Address

HILFINGER BROS., Potters.
FORT EDWARD, N. Y

Mention American Florist.

Mention American Florist.

THE "LOCKLAND" Sash Bars ✳ ✳ ✳

ARE ALWAYS SATISFACTORY.

This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.

GUTTER MATERIAL, RIDGES, SASH, ETC.

The finest CLEAR CYPRESS used.

Write for circulars and estimates. . . .

LOCKLAND LUMBER CO.
Lockland, O.

"Standard" Flower Pots.

As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address

The Whilldin Pottery Company,

BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.

Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.

A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.

We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.

SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY,
Manufacturing the
ELVERSON, SHERWOOD & BARKER
STANDARD FLOWER POTS.

Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bud Pots, etc.

ADDRESS: PITTSBURGH CLAY MF'G CO., New Brighton, Pa.

H. M. HOOKER COMPANY,
57 and 59 W. Randolph Street, CHICAGO,
NATURAL GAS MADE GLASS
FOR GREENHOUSES.
Write for latest prices.

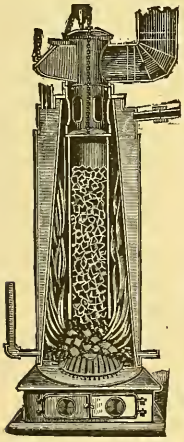
Evans' Improved

CHALLENGE
ROLLER BEARING
VENTILATING APPARATUS.

Still leads them all in ease of operation. Self-oiling. Roller bearing overcomes that grinding friction usual where weight bears on. A trial will convince you that you want only the Challenge.

ILLUSTRATED CATALOGUE FREE ON APPLICATION TO

QUAKER CITY MACHINE COMPANY, RICHMOND, IND.



THE WILKS HEATER,
FOR HEATING
GREENHOUSES, STORES, DWELLINGS, ETC.
Manufactured by THE S. WILKS MF'G CO. 123 S. Clinton St., CHICAGO, ILL.
SEND FOR CATALOGUE.

SMITH & WEBSTER,
MAKERS OF
GREENHOUSE PIPE
FOR HOT WATER AND STEAM,
193 Lake Street, - CHICAGO, ILL.

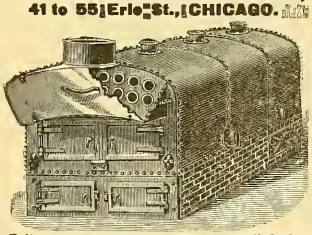
D. H. ROBERTS,
159 & 161 S. Fifth Ave., NEW YORK,
NATURAL GAS MADE GLASS
for ROSE HOUSES, CONSERVATORIES, Etc., Etc.
Our Glass received the Highest Award at the Boston Convention of the S. A. F.

BEED & KELLER
MANUFACTURERS OF FLORISTS' WIRE DESIGNS
122 W. 25th ST. NEW YORK

U. S. AND FOREIGN PATENTS Trade Marks, Designs, Opinions, Searches, &c., promptly attended to. Send sketch or model for free examination as to patentability. All work strictly confidential.

GEO. H. CHANDLEE,
Atlantic Building, WASHINGTON D. C.

KROESCHELL BROS.
IMPROVED
Greenhouse Boiler,
41 to 55 Erie St., CHICAGO.



Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around front, sides and back). Write for information.
Mention American Florist.

STANDARD HOSE MENDER.

The only Mender using ordinary galvanized wire No. 14, instead of expensive bands. Any person can handle it with perfect ease. Thousands in use and all testify to its Wonderful Merits.

Sample Box, by Mail, 50 cts.
E. HIPPARD, Youngstown, Ohio.

YOU CAN SAVE MONEY BY PURCHASING, AND GLASS BY USING
HAMILTON'S PATENT SASH LIFTER.
"It works like a charm." So say those who use it. Send us 50 cents for one sample and you will say so too.

BAY STATE HARDWARE CO.
272 Freeport Street, BOSTON, MASS.

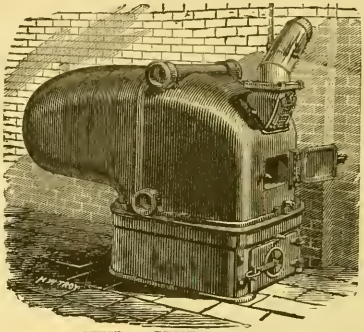
Index to Advertisers.

Adv. Rates, etc 1060
Abel C C & Co.....1062
Anchorage Rose Co.....
.... 1058 1059
Asmus Ernst.....1058 1059
Bailer F A.....1064
Balmer J A 1067
Barnard W W & Co...1063
Bay State Hdw Co....1071
Bayersdurfer H & Co .1060
Berger H H & Co.....1065
Bird F W & Son 1068
Bonsall Jos E & Son ..1065
Bos John Barth 1063
Boston Letter Co 1068
Brauer & Richter.....1064
Brown R S & Son.....1065
Burns & Raynor.....1064
Burrow J G.....1067
Burton John.....1059
Carman R W.....1068
Carmody J D.....1069
Causse A L 1062
Chandlee Geo F 1071
Chicago Cut Flower Ex1067
Cook John.....1059
Corbrey T J.....1060 1061
Dancke H A.....1063
De Lamater Iron Wks1059
Denver City Nurseries1067
De Witt Thomas 1064
Dillon J L.....1065
Dreer H A.....1062
Elliott W H.....1060
Ellison Wm.....1060
Engle W J.....1067
Fairfield C F 1064
Faust H G & Co.....1063
Felheim Lyman.....1068
Felthousen J E.....1065
Field S B.....1062
Forstermann I. 1066
Freeman Lizzie.....1064
Gardner John G 1065
Gibson J C.....1067
Gonzalez & Co.....1065
Goodyear Rubber Co.
....108 1069
Hall Ass'n.....1072
Hancock Geo 1064
Hansen Christ 1067
Harris Wm K.....1068
Hart James 1061
Hart Michael A 1061
Hartford H E.....1060
Helmi Jos.....1065
Helte Floral Co.....1067
Henderson John Co...1059
Herr Albert M.....1064
Hews A H & Co.....1070
Hillinger Bros.....1070
Hill E G & Co.....1065
Hippard E 1069 1071
Hitchings & Co.....1072
Hooker H M Co.....1070
Horan Edw C.....1061
Horan James.....1065
Hose Connection Co..1070
Houston R J.....1058
Huckins E 1068
Hulsebosch Bros 1063
Hunt E H.....1061
Hunt M A.....1066
Hunter & Purdy.....1061
Jennings E B 1066
Kaufmann Ernst & Co1068
Kemble Floral Co 1064
Kennicott Bros.....1061
Koffman E.....1060
Krick W C.....1068
Kroeschell Bros.....1071
Kuehn C A.....1060
La Roche & Stahl.....1060
Leteller & Son.....1062
Ley John H.....1065
Lockland Lumber Co..1065
Lombard R T.....1064
Long Dan'l B.....1061
Lonsdale Edwin.....1059
McBride Alex.....1065
McCarthy N F & Co....
....1058 1061
McCreu & Cole 1065
McFarland J H.....1063
McFarland J H Co....1064
McGowan John.....1064
Manz J & Co.....1066
Markey Bros 1062
Marschuetz & Co.....1058
May John N.....1066
Meech F J & Son 1065
Meyer John C & Co. 1064
Michel Plant & Bulb
Co 1062
Miliang Bros.....1061
Moffatt G J & Co.....1063
Moninger Jno C 1072
Moon Samuel C.....1065
Moore Frank L.....1059
Mullen Geo 1061
Nanz & Neuner.....1059
Nielson Hans 1058
Niles Centre Floral Co1061
Olson M.....1061
Ouwerkerk P.....1066
Peck & Sutherland.....1061
Pennock C J.....1064
Pennock Sam'l S 1060
Pierson F R Co. 1062
Pillsbury I L 1065
Pittsburg Clay Mfg Co1070
Prince A G & Co 1064
Quaker City Mach Co.1071
Randall A L.....1063
Reck John 1064
Reed Glass Co.....1072
Reed & Keller.....1071
Reiss & Brady.....1063
Renard Joseph.....1064
Rimbaud Benj.....1062
Roberts D H.....1071
Roehrs Theo.....1063
Rogers Nurseries.....1066
Rolker A & Sons.....1058
Russell S J.....1061
Salzer Jno A Seed Co.1059
Sander & Co.. 1065
Schulz Jacob.....1059
Segers Bros.....1063
Segers & Co 1062
Shelmire W R.....1064
Sheridan W F.....1061
Siebrecht & Wadley...1065
Simons R E.....1058
Sipple Doppfel & Co...1070
Situations, wants.....1058
Smith C A Floral Co..1059
Smith & Webster.....1071
Spooner Wm H. 1059
Stahl Wm 1068
Stott Garden Imp Co..1059
Styer J 1064
Sunderbruch H L.....1061
Tilton Bros 1064
Tipton & Hurst.....1068
Tricker Wm.....1064
Tupper C O 1058
Ulbricht F J.....1065
Ure John C.....1065
Vander Schoot R & Son. 1062
Van Waveren & Kruyff.. 1063
Vaughan J C.....1066
Waterbury Rubber Co1068
Weathered's Sons T W1072
Weber & Don.....1063
W Bros.....1058 1061
V 1070
W .....
Wolff L W.....
Wood Bros.....
Yoshlike H .....

When writing to any of the advertisers on this page please mention the American Florist.

GREENHOUSE HEATING & VENTILATING

Horticultural Architecture and Building.



HITCHINGS & CO.

Established 1844.

233 Mercer St., New York.

FIVE PATTERNS OF BOILERS.

NINTEEN SIZES.

Perfect Sash Raising Apparatus.

Rosehouses, Greenhouses, Etc, of Iron Frame Construction, Erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frame Benches with the "Perfect Drainage Bench Tile" or Slate Top.

SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUE.

WEATHERED'S DOUBLE DOME BOILERS

Are the Very Best.

OUR

Patent Rocking

AND

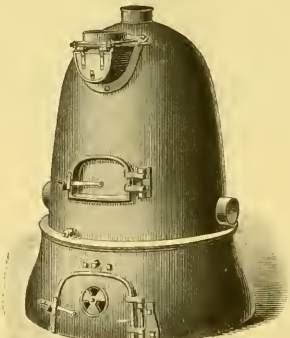
Shaking Grates

ARE

ABSOLUTELY PERFECT.

Being in the smallest sections are the least costly to keep in repair.

Send 3 Cents Postage for CATALOGUE and please mention this paper.



Proven by 40 years USE

Effective and Durable.

PATENT

Sash Raising Apparatus.

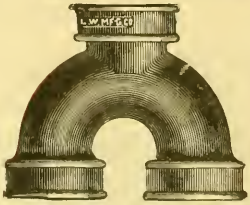
ROSE HOUSES, GREEN HOUSES, ETC.

of Iron Frame Construction, erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frame Benches with Drainage Bench, Tile or Slate.

THOMAS W. WEATHERED'S SONS, (Incorporated) 244 CANAL ST, N. Y.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

L. WOLFF MFG. CO., 93 to 117 W. Lake Street, CHICAGO.

WRITE FOR ILLUSTRATED CIRCULAR.

CYPRESS GREEN HOUSE MATERIAL

CLEAR CYPRESS SASH BARS

HOT BED AND VENTILATING SASH

JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

GLASS. ROCK BOTTOM PRICES. Send for Estimate. Satisfaction Guaranteed.
REED GLASS CO.,
65 Warren St., and 46, 48 & 50 College Place, New York City.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.
JOHN G. ESLER, Sec'y F. H. A., Saddle River, N. J.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

Goodell HH Mass Agri Col 15 Dec 93

THE AMERICAN FLORIST

A WEEKLY JOURNAL FOR THE TRADE

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, MAY 18, 1893.** **No. 259**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company.
Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,

323 Dearborn Street, CHICAGO.
Eastern Office: 67 Bromfield St., Boston.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis, Mo., August 9 to 12, 1893.

CONTENTS.

The World's Cougress Auxiliary 1073
Carnations—Seasonable hints. 1074
—American Car. Society—Correction 1074
Plant notes 1074
A Japanese curiosity (with illus) 1075
Tropical foliage plants 1075
Miscellaneous seasonable hints 1076
Damages for destruction of trees, shrubs, etc . 1076
Spiræa aruncus (illus) 1077
The World's Fair 1077
Foreign notes 1077
New York 1078
Boston 1078
Philadelphia 1078
Chicago 1078
A story without words (illus) 1079
St. Louis 1079
Leaf-rot of pelargoniums (illus). 1080
More spring humor 1080
Pansy bed at World's Fair (illus) 1081
Express rates 1081
The seed trade 1086
—Turnip vs. onion 1086
Recent legal decisions 1088
Toronto 1090
Wellesley, Mass 1092
Foreign notes 1094

EAST NORWALK, CONN.—Walter Hoyt is building a large greenhouse.

ORANGE, MASS.—F. J. White of Worcester has opened a flower store here.

SACO, ME.—George Mahoney is making extensive improvements at his place on Beach St. Alonzo Hill has opened a flower store in this city.

NEW BRITAIN, CONN.—Miss C. A. Shepard read an instructive paper on "Weeds" at the meeting of the Horticultural Society on the evening of May 2.

CORTLAND, N. Y.—Mr. L. N. Hopkins has purchased Dr. J. W. Hughes' place on Main St. and will erect greenhouses thereon. These will be conducted distinct from his plant on Groton Ave.

CORNWALL on HUDSON, N. Y.—The second annual exhibition of wild flowers by the Storm King Club will take place on Saturday, May 20. A very comprehensive display of the indigenous spring flowers of the Hudson Valley is expected.

The World's Congress Auxiliary.

The Columbian Exposition will not be simply an exhibit of the natural products of the earth, the iron, the wood, the beautiful flower, the delicious fruit; all these will be there and in wonderful variety and profusion, but there will also be the most perfect exposition the world has ever known of what man is able to do *with* these things. Not only along the line of shaping the lifeless iron and wood into machines which do his will like things of life, but also by a wise balancing of natural laws and control of conditions so influencing living things as to make them develop into new forms which gratify his taste or otherwise suit his purpose. But there will be no exhibition of power to create life, or to long defend it from the attacks of death, and so the interest of the thinking, practical man will center more in the eternal law by which the wonderful but short-lived forms were developed and can be reproduced, than in the forms themselves. He will care as much or more to confer with and learn from the producer, than to see and enjoy the production, and the greater the display of horticultural products the more earnest will be the desire for a conference or a *Congress of the Horticulturists.*

The success of horticultural science and floricultural knowledge in the United States is one of the marvels of the present age, and causes the devotees of Pomona and Flora to point with pride to the achievements of the last decade, showing that the science of plant life and development has kept pace with the advance made in other industrial pursuits. The intimate relationship existing between the art of the painter, carver and sculptor on the one hand, will be emphasized on the other by the floricultural art as exemplified by its most skilled and accomplished artists. It is right and fitting that horticulture should demand of the people truer and better recognition of its value and importance than has been accorded it in the past.

The World's Congress Auxiliary will furnish a place and give opportunity for *Horticultural Scientists* and *Practical Plantsmen* to enforce by their addresses and essays the advantages and importance of horticulture, both from a utilitarian and an artistic point of view, proving that horticulture is an important element and factor in the growth of the state.

A unique and splendid opportunity is here provided for an interchange of views between practical men, concerning the practical things in which we are all interested. Such a congress, containing representative men from the different countries of the globe, to exchange thought, compare experiences and give of their wisdom, can not fail to be productive of great and lasting benefit, and tend largely to advance horticulture from the region of the experimental to the certainty of a science.

The Columbian Exposition will mark an era in the history of the world's progress. The triumphs won in art, literature, the sciences, in things material and industrial will stand out in bold relief, commanding the attention and exciting the wonder of the world. Horticulture, represented by its twin children Pomona and Flora, will also challenge the attention of the lovers of the beautiful in nature and in art, by the wonderful achievements made in all that pertains to the successful cultivation of fruit and flower.

The officers of the World's Congress Auxiliary of the World's Columbian Exposition recognizing the peculiar value and importance of a Horticultural Congress have taken especial pains to assign to it the most favorable time, and to provide ample accommodations in the way of halls and other facilities for its meeting.

The proposition is to hold a World's Congress of Horticulturists in Chicago to commence August 16 and to last for about four days with sessions so arranged as to occupy only half of each day, leaving the remainder for visits to the Exposition proper.

The Congress is to be divided into sections such as Florists' Section, Fruit Growers' Section, Seedsmen's Section, etc. The different sections to meet in suitable halls provided for the purpose, both to listen to carefully prepared papers or addresses and for discussion of the subjects brought before them.

In addition to the meetings of the sections there will be held great mass meetings of all interested in horticulture to listen to the ablest speakers obtainable. All meetings of this and other congresses will be held in the permanent Memorial Art Palace on the Lake Front of Chicago. The Society of American Florists, the American Seed Trade Association and the American Pomological Society will hold their annual meetings during the same month.

The organization devised by the World's Congress Auxiliary to carry out the plan is the following:

1. A local committee of arrangements composed of a few men familiar with general horticulture and located so as to be able conveniently to meet in Chicago as often as may be necessary. The work of this committee is to arrange for the division of the congress into proper sections; to provide halls for their meetings, and also to select subjects for discussion and arrange for suitable men to present them, and in general to carry out the suggestions of horticulturists so as to make the congress as practically useful as possible.

2. An advisory council consisting of the prominent horticulturists of the world, who are expected without any

meeting or formal consultation among themselves, and without any special invitation, to individually offer to the committee of arrangements such suggestions concerning the congress, the topics to be discussed and the men best fitted to present them, as they think would aid in making the congress what it ought to be.

3. Committees of co-operation appointed by the horticultural societies, such as the American Pomological Society, the Society of American Florists, the American Seed Trade Association, who shall advise with the committee of arrangements in relation to all the plans for the meetings of the particular section to which they belong.

Several societies have already appointed such committees of co-operation to act with the committee of arrangements, and so many prominent horticulturists, both of this country and in Europe, have expressed a deep interest in the plan, that a great congress of horticulturists is an assured fact, and we ask all interested to do what they can by way of suggestion to the committee of arrangements, or otherwise, to make the congress a marked success. All are also earnestly requested to so arrange their visit to the World's Columbian Exposition as to be with us at the time above stated, beginning on the 16th of August, 1893.

The attendance and participation of professors in the higher institutions of learning, directors of botanical gardens, editors and authors of appropriate publications, and governmental officers interested in the work of the congress, are cordially invited.

It is expected that as the work progresses other announcements will follow this preliminary one and and that our advisory council will be largely increased.

Address any suggestions that you think would aid us to the undersigned chairman.

J. C. VAUGHAN, Chairman.
E. G. HILL, Secretary.
J. M. SAMUELS,
JOHN THORPE,
S. M. EMERY,
W. W. TRACY,
PROF WM. TRELEASE.
Committee of the World's Congress Auxiliary on a Horticultural Congress.

Committee of Co-operation of the American Seed Trade Association: W. Atlee Burpee, Chairman, Albert Dickinson, Richard Frotscher, John Fottler, Jr., C. C. Morse, John A Bruce.

Committee of Co-operation of the Society of American Florists: E. G. Hill, Chairman, W. F. Dreer, W. R. Smith, W. A. Manda, E. Asmus, James Dean, Mrs. H. H. Berger, J. T. Temple, W. H. Chadwick.

Seasonable Hints.

We have not heretofore referred to the matter of seedlings, because the excellent article of Mr. Edwin Lonsdale's in the carnation number so fully covered the ground of cross-fertilization. That part of the subject we shall not touch upon. We merely wish to call attention to the fact that every grower would be greatly benefitted by growing his own seedlings for his own use. The carnation is capricious as to its surroundings and treatment; but no more so than any other plant. While some varieties do well over a wide stretch of territory, the great majority of kinds thrive best in particular localities. This is so with the apple, pear and other fruits, and it is quite true that any variety thrives best in its original home. It is natural that it should be so. In a lot of several hundred seedlings we of course select those of good promise, as we see them growing on our own grounds. The balance are thrown away as useless. But in so doing who can say that we are not giving up something that may prove of great value in another place, under different conditions. At any rate we select from our seedlings those which promise the best, and we will find in pursuing this course for several years we will have varieties for our own use far superior to any we can buy. These we should grow in preference to all others if we desire good flowers. It is a matter which takes a little time and attention, but we think will pay handsomely without any reference to the idea of putting the seedlings on the market. It however, requires intelligent direction. We should cross-fertilize with some definite end in view, as strengthening of calyx, improved shape of flower, increased strength of stem, better color, etc. We must say in our experience that self-fertilized seed has proven almost worthless in results. True, some of the older varieties have come from self-fertilized seed, but the prizes are so few, that it is time and money wasted to work with it.

At this time of year the young plants will most likely be in trays, having been pinched off therein some time previously. When large enough they had better be potted, and when they have made good bulbs should be planted in the open ground in good rich garden soil. We prefer not to top the young plants, but allow them to grow into flower as soon as possible, when if they prove promising they are so marked and topped back. If worthless they are pulled up and thrown away. A good deal of space is thus saved when they are transferred to the house in the fall. W. R. SHELMIRE.

Avondale, Pa.

American Carnation Society Meeting.

CORRECTION.

In the February 23rd issue of the FLORIST, giving an account of the meeting of the American Carnation Society at Pittsburg, Pa., we made some comments on Mr. Chas. W. Ward's remarks at that meeting, which fuller investigation shows to have put him in an unfair light. Our statements were based on a letter written by Mr. Ward to the Horticultural Department of the World's Fair, August 7th, 1892. In this Mr. Ward assumed that a former letter from that department was an actual award of space to him in the grounds surrounding the Horticultural Building, and with this supposed award Mr. Ward expressed his full satisfaction. Our attention has been called to the fact that the actual assignment of space was not made until about six months later, about January 14th, 1893, and that the space was assigned on the Wooded Island and not in the grounds surrounding the Horticultural Building as Mr. Ward expected.

It is simple justice to Mr. Ward to make this explanation and to state that had we been in possession of the full facts of Mr. Ward's correspondence with the Department we should not have made the comments referred to.

We would have published this explanation sooner had we known just how this misunderstanding arose, but the facts on both sides we were unable to secure at an earlier date.

Plant Notes.

Dichorisandra.—In this genus are included some plants of value to a florist engaged in a general trade, two species in particular being useful where small growing foliage plants are in demand, both the species in question, D. musaica and D. undata being distinct and pretty.

Dichorisandra musaica grows to a height of twelve to eighteen inches, and has dark green ovate leaves that are marked and veined with pure white, the under surface being purplish, while D. undata also has ovate leaves, with a curiously undulated surface, and marked with grayish green and dark green bands, the reverse side of the foliage being dull purple. The latter species is, however, much more dwarf in growth than the preceding, seldom being much over six inches high, and may be used for window boxes and small ferneries. The dichorisandras are of quite easy culture, requiring only light soil, a temperature of 65°, plenty of moisture and shade and are readily propagated by cuttings.

Fittonias—These low-growing warm house plants may also be used to advantage in ferneries or in the arrangement of a dinner table in which the centre piece admits of the use of a variety of small plants. The best varieties for general use are Fittonia argyroneura, with bright green leaves netted with white, F. Pearcei, the leaves of which are somewhat larger than those of the preceding variety and marked with dark pink, and F. Verschaffelti, the foliage of the latter being dark green with midrib and veins of bright red. Cuttings of these plants root quickly and they soon become useful little plants in three-inch pots, the best plan being to put in a few cuttings from time to time in order to keep up a supply of nice young plants with well colored foliage. These are also shade-loving plants, and require no special care to insure their well-being.

Hibiscus.—Several varieties of the Chinese hibiscus may be included among the useful plants for retail trade, these being very easy to grow, and also satisfactory window plants. Among them H. Cooperii deserves more attention, its foliage being quite showily marked with olive green, white and crimson, and by means of a little pinching and trimming it can be made into a very pretty specimen, useful either for pot sales or for decorating. Some other varieties of H. sinensis are also available, among them being H. fulgidus and H. miniatus semi-plenus, a somewhat extended title for the general public to grapple with, though designating a handsome plant with brilliant vermilion semi-double flowers. H. schizopetalus is also a very showy species, the flowers of which are bright scarlet, the petals being deeply cut, and giving this plant a very distinct appearance among its fellows. The hibiscus are also valuable for out door bedding during the summer, growing and flowering quite profusely under reasonably good conditions. Cuttings form the usual method of increase for these plants and root without any difficulty.

Erauthemums.—Several species of these

A JAPANESE CURIOSITY.

pretty little flowering plants may also be included among available stock for a retail trade, being easy to manage and to increase, and quite free flowering, some of the species being also quite ornamental in foliage. Among the latter are E. atropurpureum with dark purple stems and leaves, and having somewhat the appearance of an achyranthus, and E. reticulatum, the foliage of which is veined with bright yellow. Both these species may also be used as bedding plants with good effect, and may be pinched into shape like coleus.

Among the best of those grown for their flowers only is E. pulchellum, this bearing an abundance of bright blue flowers in terminal spikes during the winter and spring, and as blue flowers are not plentiful at that season, this plant becomes a welcome addition to the stock. E. Cooperii is another pretty species, and quite distinct from the preceding, the flowers appearing from the axils of the leaves, and being pure white and marked with small purple spots. E. tuberculatum is also worth growing, and is of shrubby habit, the leaves small and dark green, the branches very slender and the flowers quite large and pure white. This plant is very different from the varieties noted above, and is one of the prettiest in the genus.

Light rich loam is the only compost needed for the welfare of cranthemums, and a temperature of 60° with full sunlight will suit them very well, while cuttings may be rooted as readily as those of geraniums. W. H. TAPLIN.

A Japanese Curiosity.

Our cut represents a dwarfed sago palm which was recently brought from Japan by Mr. Jas. Comley, gardener to Mr. F. B. Hayes, Lexington, Mass. The plant is less than twenty-four inches in height and is reputed to be over a century old.

It is a very good illustration of the patience and ingenuity exercised by the Japanese in their peculiar methods of decorative gardening.

The Propagation and Cultivation of Tropical Ornamental Foliage Plants.

[Read before the Washington Florists' Club, May 17, by Mr. John H. Ley, Anacostia, D. C.]

The rapidly increasing demand for this class of decorative plants, and the consequent trade competition, requires the grower to be especially careful for financial reasons alone to produce the most perfect specimens of their kinds in the shortest possible time and at the least expense. Most of the species used for decoration are from hot moist climates and do not require a period of rest, and even in winter should be kept slowly growing. If rest be allowed on growth recommencing the lower leaves are sure to drop off and so disfigure the plants.

As early as possible in spring (about February) the tops of dracænas, crotons, dieffenbachias, pandanus, ficus, etc. should be struck carefully without damage to their foliage, as these tops will make the very finest specimens. The side shoots of crotons will make good cuttings for the second batch. The woody roots and stems of the others, especially the dracænas and dieffenbachias, should then be cut up into short pieces and put in shallow pans and boxes, about an inch of soil covering them, placed directly on the hot pipes and watered freely. When the young shoots are two or three inches high remove to a light airy place to ripen; the cuttings may then be taken off and put in the propagating frame and in a week or so will be ready to pot off. For especially fine tops of any plants it is best not to risk the loss of leaves, but ring the bark and moss around with a good bunch of sphagnum, care being taken to keep it soaked with water until enough roots are formed to be potted off.

The side shoots of alocasias may be cut off and the old stem will continue to send up fresh shoots until all dormant eyes are exhausted. The old crowns and rhizomes of marantas, anthuriums and other aroids may be propagated in the same manner.

For ordinary plants of sphærogyne, cyanophyllums and others with large soft foliage, side cuttings will make pretty plants in one season, but if wanted for exhibition fine large tops only (ringed and mossed) should be used.

The plants being established in small pots should be shifted before roots become matted until the sized pot is reached in which they are to remain. The soil is best if rough and lumpy, consisting of turfy loam, fibrous peat and half rotten leaves. No sand is required if soil is rough enough to allow water to pass freely through; this causes rapidity of growth and large broad foliage. Liquid manure is desirable, if clear, after having been well fermented, but any sediment is liable to block up soil and cause the roots to rot. Houses should be well shaded and a little air given during the heat of the day, but the atmosphere should be at all times heavily charged with moisture. By allowing the heat to go down towards morning a heavy dew can be produced and a remarkable improvement in foliage will be the result, but the dew must be dried off early or it may spot the leaves. A free use of the hose under the foliage is needed two or three times a day to keep down red spider, thrip, scale, mealy bug and such pests, the leaves of many varieties being so very delicate that washing is impossible. In cases where this can be done, a mixture of two gallons of boiling soap suds with half a pint of kerosene oil diluted with water and allowed to cool will clean most effectually and give a fine polish to plants before marketing.

Having given the final potting and grown the plants to a sufficient size more air should be admitted to develop the color and to harden the plants. This should be about the month of September in order to have them salable before winter; but if specimens are desired for exhibition potting on and growing should continue until full size plants are obtained, it being impossible to get much more growth when a plant has attained its highest coloring. With such specimens after the pot limit has been reached strong clear liquid manure will keep them in perfect condition for a long time. The best houses for growing these plants are those in which the roof is rather flat, in order that no plant may be more than a foot or two from the glass. Iron and slate or tiles should be used for benching. With the heat and moisture required wood will decay in one year, produces fungus and acts as a breeding place for a great many varieties of insect pests.

The pipes (hot water I believe to be the best) should be equally distributed about two feet below the benches to produce a fair bottom heat and prevent one part of the plants drying before another, which gives extra trouble in watering.

Pipes overhead not only produce thrip and red spider, but prevent the formation of dew, which is most valuable, not only on ornamental foliage plants, but also on palms, ferns and many orchids. The temperature should never be less than 70°, and many with advantage will average during summer with sun heat about 100°. The floor and under the pipes should be kept well watered. A little fire heat on all cool nights during the summer will be found valuable in preventing chilling of the roots through the copious watering needful. With reference to the best soil to prepare, it is a great benefit to stack up early in the fall separate heaps of turfy loam, peat, manure and leaves in order that the frost may destroy the eggs of snails and larvæ of cut worms, etc., which in some seasons will batch in the houses by the thousands.

There is a valuable section of ornamental plants which are so different in their habit of growth as to require separate treatment in all things except atmospheric conditions. Aroids generally, marantas, alocasias, anthuriums, nepenthes and sarracenias, being almost swamp plants, should be potted in shallow pans, with abundant drainage and a mixture of sphagnum with lumps of fibrous peat and turfy loam, from which all dust has been sifted to allow free passage for their coarse succulent roots. These should be disturbed as seldom as possible and when growing freely should have an abundant supply of liquid manure.

Sarracenias being mostly natives of the southern states, require moderately cool temperature and no bottom heat. Nepenthes being natives of the East Indies, require strong heat, and to show their beautiful pitchers to advantage should be suspended from the roof in baskets. These plants strike freely from cuttings in moss and grow rapidly. Seedlings make very elegant plants in a small state, but the seed is difficult to obtain, although Mr. Oliver at the U. S. Botanic Garden in this city has hybridized and raised them most successfully. The beautiful little Australian plant, Cephalotus follicularis requires cool treatment similar to the sarracenias.

Among common market plants which are general favorites Ficus elastica, Pandanus Veitchii and utilis and Ananassa variegata do best with a drier treatment and as much sunlight as possible without scorching; plunged in a hotbed covered with sash about May and in a few months gradually hardened off, then fully exposed to the sun and air. Their tints of color become brilliant and beautiful under this treatment. Pandanus Veitchii is best propagated from small side shoots, selecting those having the best color, but all shoots root freely. P. utilis is easily obtained from seed.

For durability of foliage, cycads and araucarias stand unrivalled; their growth is made but once a year and that during a few weeks only, the principle of their cultivation being to induce the plant during the year to store up as much vigor as possible for that one development. It is best to repot these after the growth is complete and when well rooted feed liberally, keeping them outside during the hot weather.

Caladiums may also be included in the list, although their tubers are dormant during winter and should then be kept hot and dry. Every eye as soon as started may be cut, potted and placed in strong heat, so that although the new and very fine varieties recently raised in Brazil are very expensive, stock may be obtained more rapidly than from any other plant.

Among the immense number of plants grown for their foliage alone, it is impossible to mention more than those that are commonly known, but there is really no reason why any two growers should pay special attention to the same plants. Variety is charming to the public and better prices can be obtain d for a handsome specimen of a good plant not often offered for sale.

Miscellaneous Seasonable Hints.

In many sections of the country this month has been unusually cold and wet, and planting out will be late. If you wait till really there is no probability of a slight frost it will be till the first week of June; at least that is so in the northern and eastern states. If you defer planting everything that is classed as tender till the latter date, you will have to crowd three months work into one week, and every one who has to plant out or dispose of several thousand dollars worth of plants in a week or ten days knows that he gets tired of his business and life too almost. "Don't plant out my flowers till after Decoration Day, it's not safe you know," is the usual instruction from madam. But if you don't get there within 48 hours after that date you get a verbal or telephonic enquiry: "Where are my plants? I am going to be left to the last again I suppose!" A great deal of this worry and vexation can be avoided by letting people know that many things can and should be planted out by the 20th of May and will do better than if kept in the houses another two weeks.

Geraniums should be planted by the 20th of May and here is a list that if not planted should be at once: Carnations, pyrethrum (flowering and foliage), verbenas, aster, phlox, all annuals in fact except balsams, santolina, lobelia, sweet alyssum, lemon verbena, centaurea of all kinds, and many others that you know will not be injured by a very slight frost. Cannas, caladiums, coleus, alternanthera and plants that are badly injured by the least frost, must not be put out till the 1st of June. By letting people know intelligently about these facts you can avoid partially the terrible rush which must occur early in June. A great many good customers will ask you to plant their flower beds for them and if the job amounts to a good few dollars you can afford to do it without charge for labor, but in many cases it is your duty to charge for labor and it is expected.

And now a word about planting. You are anxious that the flower beds you plant for your customers shall be a success. The common way to plant is to make a hole with the trowel, stick the plant in, level off the soil, and then get the hose and attempt to soak the bed till the roots are throughly wet. This is a poor way to do it, for you will have to water a long time to get the ball of the plant throughly wet and will succeed in washing the surface of the soil in all directions, and worse than all, if the sun is shining the surface of the bed will bake so hard that it has to be immediately stirred up. The right way is to firm the plant well in the place made for it, but not fill in all the soil taken out, then water each plant, and after it has soaked down fill in the dry earth evenly and neatly. The dry earth of an inch or two covering the really well wet earth surrounding the roots of the plant will act as a mulch and is worth ten waterings with a hose on the surface. This rule applies equally well to a carnation, a geranium, a Norway spruce or an elm tree; and particularly is it of value to such plants as carnations planted in a field where there is no opportunity to give them a future watering.

This is about the right time to sow the first crop of primulas. Sown now they will be in bloom by November. Sow another crop of asters now. They will be very useful in the fall.

It is the poorest economy to let your fires out too early for the sake of a few dollars in fuel. Rose growers will tell you that if they do justice to their roses and expect to get good flowers they cannot let their fires out before June. Carnations of course have needed no fire heat for several weeks, or rather, could have done without it. But where a general stock is grown and most of the plants in flower, on a cool rainy day with the glass shaded and no fire, the result is most disastrous. Many years ago I lost the sale of two thousand show pelargoniums by letting the fire out during a wet, cold spell, although it was the middle of May. The coleus stands solemnly still when the fire goes out and few plants but suffer more or less. Keep on a little fire and a little ventilation when it is a cloudy and rainy day, even if the thermometer should be 55° outside. A rose or a geranium that has wintered all right in a temperature of 40° in a dry atmosphere and on the dry side at the root (I allude of course to young plants that are not wanted to make growth) is entirely different from a plant now, which is vigorously growing, and this remark about firing applies much more to the large class that is known as soft wooded than to the hard wooded plants. WM. SCOTT.

Buffalo, May 15, 1893.

Damages Recoverable for the Destruction of Trees and Shrubbery.

For the destruction, through negligence, of growing or mature trees and shrubbery the Supreme Court of South Dakota says, in the case of Bailey v. C. M. & St. P. Ry., that the owner may bring his action either for the value of the trees and shrubbery so destroyed, or for the injury to the real estate or his interest in it. If he bring the former action, the proper measure of damages is the market value of the trees destroyed, independent of the real estate. If he bring the latter action, the measure of damages is the diminished value of the real estate. On the trial of the above case the court adopted as the measure of damages the value of the trees so destroyed, while the railroad company, claimed the proper rule was the difference in value of the real estate, of which the trees were a part, immediately before and immediately after the injury, and cited in support two Minnesota cases. But it seems to us, says the above court, that the rule to be adopted in any case depends upon the character and object of the particular action. While growing trees and improvements are generally a part of the real estate upon which they stand, still the owner may for a particular purpose treat them as personal property. If a building be destroyed, or detached from and moved away from the owner's real estate, he may recover the value of the building, independently of its connection with the real estate, or he may bring his action for the injury to the real estate, and recover therefor. If A. sue B., and state his cause of action to be that B. dug up and carried away from his premises a quantity of gravel of the

SPIRÆA ARUNCUS.

value stated, and ask to recover therefor, the measure of the damages is the value of such gravel, separate from and independent of the injury to the premises from which it was taken; but if, for the same wrongful act of B., the action is brought by A. to recover for the injury to his premises, then the measure of the damages is not the value of the material removed, but the difference in the value of such premises immediately before and immediately after the injury. If he sue specifically for the value of the material taken away, he could not, of course, recover in such action for injury to the real estate resulting from the excavation. If he sue for the value of such material, he may recover that, and its value will be ascertained as in case of any other personal property; but, if he sue for the injury to his real estate, he may recover that, and such injury will be measured by the usual rule of diminished value. So we say the rule of damages depends upon the purpose and character of the action. A party injured as complained of in this action may bring his suit for destroying his trees, and in such action recover the value of such trees; not as a part of the realty, but their intrinsic value as detached and separated therefrom, and proved in the usual mode of proving value; or he may bring his action for injury to his real estate, and recover its diminution in value. Each action has its appropriate rule of damages. A single tree, a grove of growing trees, or a forest of mature timber has an intrinsic, estimable value for the material it contains. That value may be more, or it may be less, than what it adds to the value of the real estate upon which it stands. If the tree or the grove or the forest is destroyed, the owner ought to be allowed to exercise his own judgment whether he will seek to recover the value of his property destroyed, or the diminished value of his land from which it was destroyed. When he does this he determines the rule of damages by which his injury will be measured. Similar views prevail in New York and Nebraska.

A Good Plant for Easter Decorations.

Spiræa aruncus or "Goats Beard," as it is commonly called, is a very old plant in cultivation, being in English gardens, according to Loudon and others, since 1834.

It is a native of North America, China and Japan, in the mountains, and is also said to be found in the Himalayas. It grows from two to five feet high according to soil and situation. In the United States it is wild from the mountains of Georgia northward to New York.

It is a plant that is very easy to force. Good clumps taken up in December can be kept in cold frames or house until ready to use, potted in boxes or pots. It should be brought into the house about the middle of January and placed under the bench until it begins to grow, when it should be brought up to the light. When once started it grows very rapidly, nearly a foot a week, until its flower buds are formed. As soon as the flower buds show, if fine specimens are wanted, give weak manure watering three times a week. It likes plenty of water while growing.

The time taken to bring Spiræa aruncus into bloom is about ten weeks, in a temperature that does not go below 45° at night and up to 65° or 70° during the day. Out of doors the flowers are inclined to a yellowish white, but under glass they come almost pure white.

It is a bold handsome looking plant, the flowers keep long and on the plant carry well. The plant from which the accompanying photograph was taken was in good condition for nearly three weeks, being in a store in town for ten days. It was over five feet in height and fully five feet across. JACKSON DAWSON.

The World's Fair.

While some little work yet remains to be done in the way of finishing touches the floricultural display in the building is now practically complete, and it presents a very handsome appearance. Beginning with next issue we shall give a weekly description of exhibits in detail, with illustrations from photograhs taken especially for the FLORIST. It is very gratifying to be able to say that the floricultural display is at date the most finished of any department of the Exposition. And that the display is thoroughly appreciated by the public is demonstrated by the great crowds that constantly surge through the building.

Under the great mound beneath the dome is a crystal cave brilliantly illuminated by electric lights that proves quite an attraction to visitors.

In the wing devoted to seeds, implements and florists' supplies, etc., the exhibitors are not all so forward as in the plant department, but a few days more will put things in shape. This display promises to be very instructive also.

The season is backward and the island is not yet fully dressed out with spring foliage. But the stock seems to have come through the winter in good shape in spite of the very severe weather.

The World's Congress Auxiliary was inaugurated this week by the Women's Congress at the Art Palace on the lake front. The great hall was crowded with representative women from all over the world, and the opening ceremonies were very impressive. The horticultural congress will be held in August, the week after the meeting of the Society of American Florists in St. Louis. The program is not yet complete, but we learn that the general subject of floriculture, its progress in the past and advancement in the future, has been assigned to Mr. Robert Craig, of Philadelphia, which insures broad and practical treatment of the subject, and an essay that will do much to open the eyes of the general public as to the great commercial importance of floriculture as it is to-day.

A report was circulated by some of the morning papers this week that at the close of the Exposition the Horticultural building and the entire collection of plants contained therein would be handed over to the new Chicago University, for the purpose of founding a botanic garden. Investigation of this story soon proved that it was entirely without foundation. The faculty of the college is desirous of obtaining a botanic garden, and there is some hope that they may in the future acquire the Midway Plaisance for this purpose, but this matter is entirely in the clouds at present.

Foreign Notes.

Lilac Marie Legrange is an excellent dwarf kind for growing in pots. It is slender in growth, branching freely, and the flowers, which are produced in large trusses, are pure white.

Among new French chrysanthemums of the hairy type we find Fleur Lyonnaise; it is described as a large, full, slightly incurved flower of a fine purple-red color, shaded carmine, the reverse of the petals bronze. The same raiser (M. Crozy), is also sending out an entirely new section of hairy chrysanthemums characterized by the extreme fineness of the petals, which resemble human hair. One of this

type is Marquise Gaspard de Clermont-Tonnerre; rather an awkward mouthful for every-day use.

Sarracenia Mandaiana is a new variety, supposed to be a natural hybrid between S. flava rubra and S. Drummondi. The pitchers are green, marbled with silvery spots just under the rim. The lid is green, with darker nerves and silvery blotches; the hinge of the lid is blotched with purplish brown.

New York.

The cut flower trade is in a very bad shape. There is not any demand for more than a small fraction of the flowers coming in since the warm weather began. Lily of the valley of finest quality, frame grown, sells for but one dollar per hundred. Roses of enormous size can be had almost for a song. It will not be long before the rose houses are emptied of their contents, however, and things will change then if not before.

Wiegand has got pretty near to the last of his big Jacqs and hybrids. There have been no finer roses in the market this season. Ernst Asmus has several of his new iron houses completed. He will grow the roses in these houses on beds built on rubble stone, etc., with hot water pipes running through underneath each bed.

The spring show was not a financial success. The main cause was the postponement of the date of the show as originally contemplated to a time when a good exhibition was an impossibility, and it is generally known that the Madison Square Garden Co. was responsible for this.

E. W. Weimar's basket of flowers, which won first prize, was made entirely of Rothschild roses. Every bloom was a specimen, and the arrangement was perfect. Warendorf's basket was of Capt. Christy, lily of the valley and Adiantum Farleyense.

Secretary Young and Treasurer Weathered, on behalf of the Florists' Club, entertained the judges at dinner at the Arena on 31st street. It was a very jolly affair, and the fondness of the Philadelphia member for lobster and bacon was only one of the humorous incidents.

Exhibitors sending plants or flowers to the monthly exhibition of the Florists' Club on May 22 are requested to deliver the goods at 43rd street entrance of the Grand Central Palace.

A floral fan kept in motion overhead is said to be one of the coming novelties in dining room decoration for summer. This will be both useful and ornamental.

Mr. W. Bayard Cutting has shipped two carloads of rhododendrons from his place at Islip to the World's Fair.

August Rolker & Sons report that their sales of paper flower pots will reach half a million this spring.

Miss Jeanette Kropp of Chicago sailed on May 13 on steamer Spardam for Europe. Mr. J. M. Keller is quite ill with the grip.

Boston.

The sudden jump to summer weather has driven in a big overstock of flowers to the market, and every day during the past week dealers have found it impossible to place their stock to advantage. Prices have gone all to pieces on everything. Roses are feeling the effect of the hot weather, and do not last long unless cut very close. Violets of the regular winter varieties are all finished for this season, but the beautiful dark blue and deliciously fragrant "Cape Cod violet," so called, is coming in in large quantities, and is seen everywhere in stores and on street stands. There is an abundance of Harrisii and longiflorum lilies, and a prospect that there will be quite a stock of them for Decoration Day.

Decoration Day supplies is a question that is causing considerable speculation just now. Wholesale dealers find it next to impossible to quote prices in advance, so much depends upon the weather which will intervene.

Agents of foreign bulb houses, with unpronounceable and unspellable names, continue to throng the neighborhood. It is safe to say that a good many of them will stay at home next year.

One of the most interesting places one can go to spend a profitable hour is to the University Museum at Harvard College, where the famous Ware collection of Blaschka glass models of flowers are on exhibition. These models are the work of Leopold and Rudolph Blaschka, of Germany. They consist of nearly four hundred large models representing sprays and clusters of flowers, and over a thousand magnified cross sections, showing the structure of petals, ovaries, stamens and other organs. To the student in botany they are especially valuable, for the imitations are wonderfully perfect, being hardly distinguishable from living flowers.

Philadelphia.

Robert Craig has received another lot of fine palms from abroad; they came in excellent condition. Kentias, arecas and latanias make up the assortment. They are number one plants in every respect, and while large and bushy appear to have been grown in pots from one to two sizes smaller than the same kinds of plants are grown here.

Mr. Craig has just returned from the World's Fair at Chicago and gives a glowing report of the whole exposition, and the Horticultural department in particular. Mr. Craig says now that Mr. Thorpe has assumed entire control he works from daylight until dark, doing everything that lays in his power to keep his department ahead of the others, where it has been for sometime. Mr. Craig thinks that the first of July will see all the departments of the Fair completed, and that no one can have any idea of the magnitude of the exposition, until they can see it themselves.

Nearly all the exhibits from Philadelphia have arrived and are in place. Mr. Blanc's cactus display is a surprise to all who see it. Although the Mexican Government sent a lot of these plants, and the state of California another collection, Mr. Blanc's is much better than either, and will be one of the leading features of the Horticultural Department.

Business is falling off, the difference in the volume of trade being quite noticeable.

In large roses, Beauties are again on top. Brunners and Laings are about done; $25 is high water mark for the best of this stock. The finest La France bring $4, while choice Mermets and Brides are quoted at $5 and $6. The Mermets will soon be gone, and then La France will bring about its present figure until fall. Perles, Gontiers, Sunsets and Niphetos are selling for $2 and $3.

Carnations are very plentiful, but $1.50 is still asked for the best. They are very fine for the season, and some varieties are as good as at any time this year. Outside valley has broken the price of this popular flower, and the finest may now be had for $2. Sweet peas are very fine and sell well, the best bringing $2.

The market at present is flooded with lilacs from outside; their season is a short lived one, being a bunch of buds, then open flowers, and finally falling apart all in one week. Smilax is scarce, and brings 20 to 25 readily, while its rival, Asparagus plumosus, sells for 75.

The first sale this season of Philadelphia palms at Young's auction rooms, New York, took place last Thursday, and was very successful, good prices being realized. The stock was from the establishments of Messrs. Craig, Harris, Lonsdale, and Burton.

At the Club alleys business is booming. The Harris team of seven men defeated the Westcott seven by 40 pins last Thursday night. A sweepstake prize the nucleus of which is the prize captured by Anderson in the match some time ago, and which he magnanimously offers for the boys again, is to be bowled on Monday nights, and a handicap that places all the players on the same level is set down for Saturday evening, thirty games to be rolled in each match. K.

Chicago.

At the last meeting of the Florist Club the question of date for the proposed contest in floral arrangement at the World's Fair was again brought up, and after it had been pointed out by several speakers that if the growers of Chicago and vicinity did not make provision for a supply of flowers during August and the other summer months they would certainly make a very serious blunder, in view of the fact that the city would be thronged with strangers during the entire time that the World's Fair was open, and that there would be more or less entertaining going on all the time, with a consequent call for flowers in considerable quantities, the action at last meeting by which the date was changed from August to October was reconsidered, and a motion that the date for the contest be changed to the week immediately after the St. Louis convention was adopted by a unanimous vote. The committee submitted the proposed schedule, with some slight changes from that presented at the last meeting, and after some little discussion the committee was authorized to present same to the other clubs for their consideration with the approval of the Chicago Club.

Of course this list is purely preliminary in its character, and may be radically changed when submitted to the other clubs for their approval or amendment. The committee announced that it would ask each of the other clubs to consider the schedule, and also to appoint a committee to act in conjunction with committees from the other clubs, which general board should have control of the contest and make the rules for its government, as well as to adopt the premium list. The committee also announced its intention of asking the various clubs to offer prizes for competition in the contest, and on motion it was resolved that the Chicago Florist Club appropriate the sum of $100 to be used in purchasing a suitable trophy to be offered as a prize in some one of the classes. It was believed to be best to first permit the other clubs to make selections of the classes for which they wished to offer prizes, the Chicago Club to use its prize to fill up any vacancy that might occur. The general sentiment seemed to be that this prize would be most suitable in the form of a handsome silver vase, which the winner could make useful as well as ornamental, and which would

have a certain advertising value to him when placed in his window filled with flowers. The advantages of having the contest in August were manifest. The majority of the members who are present at the St. Louis convention will be present in Chicago the week after, and especially in view of the fact that the horticultural section of the World's Congress Auxiliary will be held in Chicago that week. A suggestion was made that the committee see if it would be possible to secure space for the contest in the new Art Palace on the lake front in which the congress would be held, as this would be much more convenient than the Horticultural Building at the Fair. The committee announced that it would consider this phase of the question.

The secretary of the Club was instructed to obtain a suitable register to be kept at the Club's headquarters, in which visitors might register, and at the same time specify which hotel they were stopping at, so that subsequent arrivals could easily ascertain who were in the city and where they were stopping.

The table was decorated by two very handsome calceolarias, brought to the meeting by Mr. Chas. Stromback, head gardener at Lincoln Park. All present pronounced them to be the finest pair of calceolarias they had ever seen. They certainly were in magnificent form. In response to a request from the chairman for some details as to the culture of the calceolaria, Mr. Stromback replied that the seed from which the two plants on the table were grown was procured from Dreer, and that the seed was planted September 1 last in shallow seed pans. He fills the pans nearly full of good soil with an admixture of sand, sows the seed on the surface, and then covers with a sprinkling of soil. When large enough the little plants are pricked out in boxes, and when they have made five or six leaves they are potted into 2½-inch pots. Later on they are shifted to 3-inch and from this to 5 or 6-inch pots. For the first potting he uses soil with a mixture of sand much the same as for the seed pan, but for the subsequent shifts he uses stronger soil. He depends entirely upon the soil for food, and does not use any liquid manure. He holds the plants quite cool through the entire season, aiming to keep them at about 45° to 50°. He finds that when green fly once obtains a hold on calceolarias it is extremely difficult to dislodge, and in order to prevent their obtaining any foot-hold whatever he keeps tobacco stems thickly spread between the pots. He finds that sunshine is very apt to injure the flowers, turning them brown in spots, and while giving all the light possible he is careful to shade from strong sunshine.

Mr. J. T. Anthony has leased the A. T. Jackson establishment at Bowmanville, and will hereafter be more prominent in the ranks of the growers. This is purely a side venture, and will make no change as regards his other establishments.

The flower market has fluctuated extremely during the past week, although quoted prices remain the same. Bright weather brought out roses in great quantity, and there is a great increase in the number of carnations. It seems as if every stock comes into crop at the same time.

Business was hardly as active as the preceding week, and a great deal of stuff went to the fakirs, naturally reducing prices. Some of our friends in Texas have formed the mistaken impression that the Chicago market is just hungering for Cape jasmine, and they are sending these flowers in by the bushel. South Water street is flooded with it, and the express companies are trying, not very successfully, to sell it for enough to pay the charges on the boxes. We know that this flower has never sold well, except in small quantities, and it is a manifest absurdity to think it will pay to ship heavily except for Decoration Day.

Outdoor flowers are not growing plentiful, having received another check through cold weather, but fine pæonies have made their appearance, though there is but a limited demand for them. Out door valley is very good, but the best tulips are from cold frames. Some extra good valley from frames was noted; the pips had never been untied, but were left in the original bunches. The flowers were fine, and the foliage excellent.

Mr. J. A. Evans, of Richmond, Ind., has been spending a few days in the city looking after the interests of the Challenge ventilating apparatus.

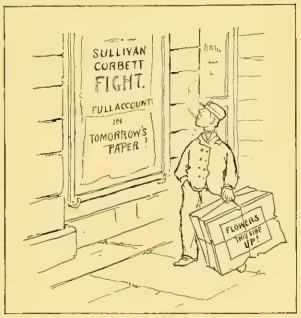
Mr. Louis Noe, Madison, N. J., and his brother-in-law, are in the city. The latter will remain if he can find a greenhouse plant to suit him, and at the right figure.

Mr. G. Kruyff, Sassenheim, Holland, was a recent visitor, and he dissents from Mr. Scott's statement in his Buffalo notes that the last bulb man had called. He claims the distinction of being the last until another "last" one turns up.

A Story Without Words.

1.

2.



3.

4.

St. Louis.

The demand has remained steady for the past week. The increasing warm weather has helped to swell the supply, but not enough as yet to break the market.

Bedding has begun in earnest and all are busy with the outside work. In a visit to Belleville (from which considerable stuff is shipped to St. Louis) lately some very good stock was seen. The Halstead Floral Co. had a fine house of La France which they will be cutting in quantity just about Decoration Day, as they are now showing a fine lot of buds. They also have a house of Beauties which have already been planted for the coming season. Some callas were noted in very large pots, at least 12 inches. A record has been kept of them and some were found to have given eighteen flowers during the season. This seemed a rather high figure, but a neighboring florist stated that at one time he had counted where fourteen flowers had been removed from a single plant. Some good hydrangeas were also seen here, they being exceptionally short and stout. A house of carnations was covered with flowers smaller than during the winter, although still of good size.

Several beds of geraniums of the newer varieties have attracted much attention, they being quite an advance over the older sorts, both in size of plants and coloring. During the past severe winter they have been troubled at times to keep the houses, which are heated by hot water, warm enough. They are all right until the thermometer begins to go below zero, then the power is not sufficient. They expect to put in during the summer a steam boiler to be used whenever necessary as an auxiliary to the hot water heating and will supply several pipes in each of the houses.

At Mr. E. W. Guy's the roses were in good shape. He has been troubled lately with mildew, owing to his boiler pit having been flooded during the recent heavy rains, this putting a stop to firing. The

stock however was strong, some Hoste being especially so. A center bench of Wooltons shows what that rose can do when given a fair show and good treatment. The stock all through shows the skill that has been put upon it.

At A. G. Fehr's was seen a fine house of smilax and also of carnations. He still finds the best varieties of their respective color to be Hinze's White and Portia. An odd thing was noticed here. Although the distance from Mr. Halstead's place was very little, the soil was quite distinct, and it has been found that the varieties doing best in one place are no good at the other. A nice lot of cyclamens were noticed, they being in frames and quite promising. Mr. Fehr must have his eye set on the cyclamen prize offered at the fall show.

A call at Mr. Alex Waldbart's several days later found him in the midst of his bedding season and very busy. An exceptionally uniform frame of alternanthera was noted, and upon its being remarked he detailed the way of growing it, which differs in several ways from the accepted method. The stock plants are carried through in the ordinary manner, and in the spring the tops are taken off, but instead of being put into the cutting bench they are potted into 2-inch pots, and plunged in a frame with bottom heat, proper care being taken in regard to shading and airing. The percentage lost is inconsiderable, and the saving in time and labor amounts to a good deal. They root all alike and are very uniform when wanted for use.

A meeting of the members of the local club interested in bowling was held on the 13th and a committee appointed to formulate a constitution and set of by-laws, which are to be reported at the next meeting, when a permanent organization will be established. The eastern clubs can rest assured that the local talent will give them a rub during the summer.

R. F. T.

Leaf Rot of Pelargoniums.

A peculiar leaf trouble of the pelargoniums (geraniums) has been prominent of late. At first the affected leaf loses its normal green color in certain patches and becomes of a watery appearance. Later these places turn brown and the leaf dies. Under the microscope no fungus other than bacteria are to be found in the early condition of the trouble. The germ is about twice as long as broad and abounds in the watery patches. The bacterium when grown upon agar has a slight yellowish color and forms circular points of much regularity.

Upon the older leaves and the petioles and stems a straw colored corky formation seems to follow the work of this bacterium. No indications of the stem turning brown with a soft rot have been found associated with this trouble, which it may be said is wide spread, as specimens of it have been received from many places throughout the east and west.

The engraving shows a leaf affected with the disease in question. It is from a direct sun print and the light spots are shown dark. BYRON D. HALSTED.

Rutgers College, April 5, '93.

LEAF ROT OF PELARGONIUMS.

More Spring Humor.

The correspondent of the *N. Y. Recorder* went to the Union Square Market at the "screech of dawn," and then returning home gave expression to the following combination of wit, wisdom and displeasure:

At all events, I paid $3 for a medium-sized azalea plant that wouldn't have cost much more at a florist's.

Besides, the latter will send plants home free of expense.

My advice to would-be visitors is to go as late as possible.

The early comers have to pay the largest prices.

I said to one man:

"How much is that plant, please?"

"That? That's an ozalia, lady."

"I know it's an azalea," replied I, with an accent on the 'a,' "but how much is it?"

"Hey, Ike! trow over dat ozalia, will yer? Dis ozalia, lady, is a beauty. Seeing' it's you, you can have it for three fifty."

He was an impudent fellow, and it semed like sacrilege to see him handling anything as delicate and beautiful as flowers.

The *N. Y. Evening World* attended the opening of the market on March 28. It made a brave attempt to be funny but it was cold work, for

The third annual opening of the Union Square Flower Market was a miserable, dismal, blue-nosed, pink-eared, goose-fleshy affair.

Eighty growers were expected on the Plaza, and the forty-nine that didn't come have reason to congratulate themselves.

Gentle Spring was not on hand. Neither was old Sol. At 6 A. M., he had not opened half an eye. Forty minutes later he put his head above a pile of gray blankets and began to wink wickedly at the misguided Long Islanders and the early birds from the Flower Committees of uptown churches.

The wagons, with their despondent steeds, lined the south side of the Plaza. Every horse was blanketed, and not a flower was visible. The owners, walking up and down the graystone pavement to keep their blood in circulation, were as grave as a lot of undertakers.

They had been there since 1 o'clock, and they were just as miserable as they appeared to be.

* * * *

Most of these buyers were women—fat, jolly and business-like. The famous flower sisters, Lizzie and Annie, were as ubiquitous as ever. They were on hand at 3 A. M., and between that hour and 7 o'clock they had been over in the Florist's Cellar for hot coffee three times.

The *New York Times* man was there too, and this is what he saw:

Lizzie was in high good humor. Lizzie is famous among the florists, not perhaps, as the child, but rather as the grown daughter of their regiment. Lizzie is over twenty-one years of age, buxom, and business-like. She has no greenhouse and no regular business stand, but sells flowers partly for fun and partly for the good living she makes out of it. Yesterday she wore a brown stuff dress with a big checked apron, a hat of dark green velvet with a rococo feather, a short velvet jacket, and no gloves. She says that her real name is Elizabeth von Schalcha, and confesses that her husband—far away in Germany—is a Baron whose name is written high in the history of fatherland. The Baron was not expected at the flower market yesterday.

A correspondent in the *N. Y. World* has been comparing the flower girl of popular fancy and the flower girl of fact, much to the disadvantage of the latter. Of the former he says:

Everybody knows them as they exist in masquerades, in stories and in the popular fancy. They are young and willowy of form, and rejoice in the possession of "appealing" brown eyes. Their voices are of singular sweetness and they utter the words "sweet violets" or "here are your dewy roses" every now and then in a plaintive way that makes even the hard-hearted merchant promptly buy a boutonniere at an unheard-of-price.

They seldom wear any covering on their luxuriant locks, and when they do it is a broad-brimmed hat that casts bewitching shadows on their faces. They have an artless way of prattling to the casual customer about their home lives and widowed mothers, and the little cottages in whose garden plot they grow flowers with miraculous disregard for the exigencies of climate.

Regarding the real flower girl the following is his mournful verdict:

None of them is in the flower of youth. Fat, forty and phlegmatic is their state; rusty black is their attire. In place of the unbound tresses of fiction, they prudently cover their scant locks with voluminous woollen shawls. They sit in corners formed by the protection of store windows, and they are a most effective foil for their tables of glowing color. They blink contentedly at the passers-by. Not even the keen desire for trade spurs them on to anything like exertion to get rid of their stock. They are willing to sell to whomsoever cares to buy, and that is all.

Instead of having the confiding natures one has always been led to believe they possessed, their reticence would be a model to the oyster. Instead of pouring forth their family histories and the details of their daily life, they are coldly silent concerning these things.

Instead of the ardent devotion to their calling which characterize the flower girls of light opera, there is a good deal of apathy among the flower-women. Ask them if they like flowers and they will say: "Ye-es—good enough," in tones revealing that a dish of cabbage hath charms which mignonette cannot claim, and that the hue of the ruddy beet rivals the Jacqueminot in their estimation.

Ask them if they like their work and for a moment their apathy is stirred. They eye you with indignation.

"Like the worruk, is it?" said one. "Is it this grindin' toil that ye'd be expectin' us to like?"

And her stout, black-robed figure fairly shook with annoyance.

The flower girl of fiction used to have customers mainly of the masculine gender. The flower woman says that hers are mainly women.

"They sees the flowers as they is passing," said one with a reckless disregard of grammatical number, "and they comes, a-feelin' them and a-fingerin' of them to see if they ain't stale, and askin' if they ain't very dear, and finally pickin' out the cheapest. Yes, we sells mostly to women."

And at this final trouble endured by the long-suffering race, she relapsed into silence and could not be moved to speak again except to murmur an acquiescence when it was asked if street flowers were cheaper than store flowers because only those that had begun to grow old were sent out. Alas for the dream of blossoms plucked each morning in the garden plot!

DO YOU WANT an alphabetical list of the chrysanthemums in commerce in America, with class and a brief accurate description of each one, and synonyms noted? You will find such a list in our trade directory and reference book.

WE request subscribers to make remittance by draft or money order when renewing subscriptions, and to keep a record of the numbers and dates of same. This is to guard against losses in the mails.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser in these columns.

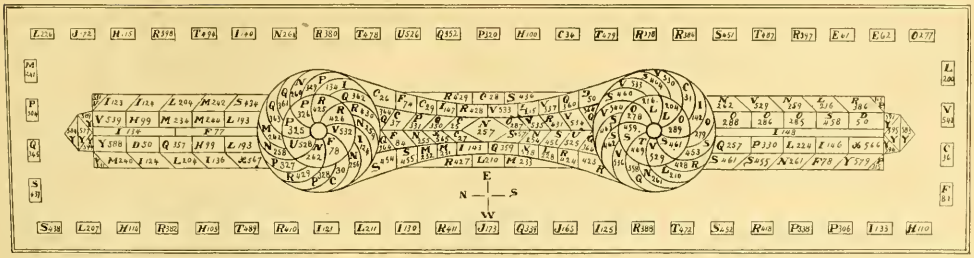


DIAGRAM OF THE NORTH PANSY BED IN FRONT OF THE HORTICULTURAL BUILDING AT THE WORLD'S FAIR.

Key to Diagram.

C.

25 Giant fancy 3 spotted.
26 " Show.
27 " fancy 5 spotted.
28 " Lord Beaconsfield.
29 " fancy striped.
30 " Royal purple.
31 " Auriculaflora.
34 Bugnot's.
36 Peacock.
37 Cassier's.

D.

50 Trimardeau Giant de Lemoine.

E.

61 Fancy choice mixed.
62 Choice show.

F.

74 Trimadreau striped.
77 " King of the Black
78 " Yellow.
81 Quadricolor.
84 Cassier's.

H.

99 Trimardeau.
100 Bugnot's superbe.
105 Purple and white.
110 Quadricolor.
114 Gold margined.
115 Striped.

I.

121 Violet bordered white.
123 Victoria.
124 Trimardeau, Lord Beaconsfield.
125 Purple, bordered white.
130 " " yellow.
133 Quadricolor.
134 Trimardeau, black.
136 " Emperor William.
140 Bright golden.
142 Trimardeau auriculaflora.
143 Monstrous Checkered.
146 Trimardeau Giant mixed.
147 " " striped.
148 White, black centre.

J.

165 Violet, golden edge.
172 Striped.
173 Gold bronze.

L.

193 Trimardeau.
200 Peacock.
201 Giant white.
207 Gold margined.
210 Giant black blue.
211 Violet margined white.
215 Giant striped.
216 " yellow.
224 Large flowering French mixed.
226 Striped.
228 Benary's large flowering blotched.

M.

231 Lorenz's improved large spotted.
232 " very large flowered large blotched.
233 La Perfection.
234 Lorenz's improved Trimardeau.
241 Striped fancy Belgian.
242 Trimadeau Emp. Wm.
244 "
249 Fiery Dragon.

N.

254 Bugnot's large blotched.
255 Cassier's.
256 Trimardeau atropurpurea.
257 " golden yellow, dark eye.
258 " Emp. Wm.
259 " Lord Beaconsfield.
260 " King of the Black.
261 " Violet blue.
262 " White with eye.
264 Fire King.

O.

277 Peacock.
278 Large white.
279 " blue.
280 " black.
285 " extra fine mixed.
286 Very large 1st choice mixed.
287 Bugnot's extra large mixed
288 Large flowering very fine mixed.
289 " yellow purple.

P.

304 Striata perfecta.
307 Quadricolor.
315 Maxima.
320 Bugnot's.
325 Giant Trimardeau white with eye.
326 " " yellow with eye.
327 " " Emp. Wm.
328 " " atropurpurea.
329 " " black.
330 " " mixed.
331 Cassier's giant.

Q.

338 Quadricolor.
339 Gold bordered.
345 Striped.
346 Yellow shades.
350 Cassier's 5 blotched.
352 Bugnot's.
357 Trimardeau 1st Quality finest mixed.
358 Giant Paris Trim. dark purple violet.
359 " " " auriculacolored.
360 " " " striped.
361 " " " black. (Moor King).
362 " " " Lord Beaconsfield.
363 " " " Emp. Wm.
364 " " " yellow shades.

R.

378 5 spotted on white ground.
380 5 " " red "
382 Large spotted on white and red ground
386 " " white, blue edge.
388 " " yellow " "
397 Striped on lilac ground.
398 " " bronze "
410 Purple white edge.
411 " yellow "
418 Gloriosa perfecta (Quadricolor).
423 Trimardeau violet white edge.
424 " " yellow.
425 " white giant.
426 " yellow "
427 " Bronze, gold bronze.
428 " Dark colored.
429 " atropurpurea.
430 " Lord Beaconsfield.
431 Cassier's 3 and 5 spotted.

S.

434 Wallflower colored.
436 Atropurpurea.
437 Striata perfecta.
438 Gold margined.
451 Fuerst Bismarck.
452 Quadricolor (gloriosa perfecta)
453 Giant blue.
454 " white, ground marbled.
455 " yellow " "
456 Cassier's.
457 Giant Bugnot's.
458 " Suberb mixed.
459 " yellow.
460 " black.
461 " white.
462 " Emp. Wm.
463 " Lord Beaconsfield.
464 " Purple.

T.

469 Giant white.
472 Quadricolor or gloriosa perfecta.
478 5 spotted on red ground.
479 5 " white "
487 Striped on lilac "
494 " " bronze ground.
498 Purple, white edge.

U.

525 Cassier's.
526 Bugnot's.
528 Trimardeau, yellow, black eye.

V.

529 Giant yellow.
530 " rich purple.
531 " leaf variegated.
532 " white, blue eye.
533 " King of the black.
534 " Cassier's.
535 " Bugnot's.
536 " Emp. Wm.
537 " Striped.
538 " blotched and stained
539 " Trimardeau.
540 " Lord Beaconsfield.
542 Peacock.

X.

565 Giant 5 spotted.
566 " fancy mixed.
567 Victoria.

Y.

577 Black, red borders.
579 White, blue centre.
583 Lord Beaconsfield.
584 Light blue.
588 Trimardeau giant.
589 Havana brown
591 Alba marginata.
595 Black with gold bronze.
596 Violet bordered white.
599 Meteor.

Express Rates.

The Committee on Express Rates of the Society of American Florists have finally succeeded in making an impression upon the Association of Traffic Managers of Express Companies, though the concession is not what was desired. Nevertheless a concession has been obtained, and in interpreting the new ruling the agents of some of the companies have construed it to mean what the committee wished the companies to concede.

The committee discovered that a special low rate was made on trees and shrubs, they being carried at the general special rates for produce between points where such specials existed, and the plan was to have plants included in this classification. Every one knows that the special rates on produce (fresh fruit, vegetables, etc.) is very low, and the concession would have been much greater than the most sanguine could have reasonably hoped for. But the existence of this special in favor of trees and shrubs gave the claim of the committee a "standing in court," and the chances of succeeding in getting the companies to enlarge the existing rule on nursery stock were greater than to secure a new ruling on plants alone. Therefore the committee presented the matter to the traffic association in the following form:

PRESENT CLASSIFICATION OF NURSERY STOCK.

Trees and shrubs for setting, when boxed or baled and strawed, prepaid or guaranteed, will be carried at the general special rates for produce between points where such specials exist, and between points where no general specials exist, they will be taken at 20 per cent. less than merchandise rates. Pound rates minimum charge 35 cents. This applies only to points reached by rail.

PRESENT CLASSIFICATION OF PLANTS.

Live plants, boxed or crated, so that they can be loaded with other freight without damage, prepaid or guaranteed, single merchandise rates; when not so boxed or crated, double merchandise rates.

SUGGESTED SUBSTITUTE FOR BOTH OF ABOVE.

Trees, plants and shrubs, when boxed, crated or baled and strawed, or otherwise packed, so that they can be loaded with other freight without damage, prepaid or guaranteed, will be carried at the general special rates for produce between points where such specials exist, and between points where no general specials exist they will be taken at 20 per cent. less than merchandise rates. When not boxed, crated, baled, or otherwise packed so that they can be loaded with other freight without damage, double merchandise rates. Pound rates, minimum charge 35 cents. This applies only to points reached by rail.

After a great deal of active work on the part of Mr. P. O'Mara, of Peter Henderson & Co., the New York member of the committee, the Traffic Association, which meets in that city, finally took action, resulting in the adoption of the following ruling:

"Strawberry or vegetable plants when boxed, crated or packed in any way so that they can be loaded with other freight without damage, prepaid or guaranteed, will be carried at the same rate as trees and shrubs, which is the general special rate for produce between points where such specials exist, and between points where no general special exists they will be taken at 20 per cent. less than merchandise rates."

Before this ruling was officially promulgated and made public, agents of New York companies accepted general plant shipments from Messrs. Henderson & Co., at the new rate, and the committee was assured that their request had been fully granted. But it subsequently transpired that the ruling had been liberally interpreted by the agents mentioned, and other agents were less liberal and would admit under the new rule only strawberry, and vegetable plants such as tomatoes, cabbage, etc. But the superintendents in New York believe that all plant shipments when boxed tight like ordinary merchandise should be carried at the new rate. Whether the example set by the New York superintendents will govern to any extent other agents throughout the country the committee cannot say, and this can only be determined by raising the question with each agent.

In any event progress has been made and it is the belief of the committee that though some agents may refuse to interpret the new ruling as liberally as most of the New York agents, a uniform decision will be finally reached and that it will be in our favor.

The committee, which consists of Messrs. G. L. Grant, Chicago, P. O'Mara, New York, W. F. Dreer, Philadelphia, and P. Welch, Boston, is certainly entitled to a great deal of credit for the result accomplished, and to Mr. O'Mara the thanks of the trade are especially due for his untiring energy in constantly pushing the matter on the attention of the Traffic Association in spite of constant assurances from the members that his efforts were useless and that the association would never make any such concessions. With a uniform low express rate on plants all over the country the saving to the trade will be enormous, and the shipping trade will receive a great impetus.

HAVERHILL, MASS.—On May 2 Mrs. C. J. Hilton read an interesting essay on the fruits, flowers and natural history of Australia before the Horticultural Society.

DARLINGTON, S. C.—The first annual floral fair of the Horticultural Society opened on April 26 and was a pronounced success artistically, socially and financially. Palms, roses, pansies and pelargoniums were shown in profusion, many of the exhibitors being ladies.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant adva. not admitted under this head.

SITUATION WANTED—As manager or foreman in a private or large commercial place; has a thorough practical knowledge of the business. Best references. Address S E J, Tom's River, N. J.

SITUATION WANTED—By young man in private place. Has had ten years' experience; well up in growing plants, roses, carnations and violets. Address, T M, cor. Oak & West sts., W. Hoboken, N. J.

SITUATION WANTED—By gardener, 23, single, 11 years experience in greenhouses, graperies and hotbeds and in outside flowers and vegetables. Best Chicago refs. Address G J, care American Florist.

SITUATION WANTED—1st June by first-class florist; 11 years' experience in general greenhouse work, roses and carnations; good design worker and decorator; honest, industrious; 28 years of age. Address M A, care American Florist.

SITUATION WANTED—1st June by first-class florist, age 24; 10 years' experience; honest and industrious; good cut flower worker and salesman, well up in roses, carnations, palms and general greenhouse stock. Address B M, care American Florist.

SITUATION WANTED—By practical gardener, 23 years' experience in growing flowers, stove and greenhouse plants, fruit, vegetables; also landscape work; English; married; no family; aged 42; 5 years with present employer; best of references. Address F F, Elm Grove, Wis.

SITUATION WANTED—By steady sober German, 22 years old, 8 years' experience inside and out; good and quick designer, 4 years in this country; can write, read and speak English well. Would like to take charge of private place or flower store, best references. Address, stating salary, etc., C W, 355 W. Huron St., Chicago.

WANTED—Two experienced rose growers. Steady work and good wages to the right men. O. P. BASSETT, Hinsdale, Ill.

WANTED TO RENT—Empty greenhouses near a big city, to raise cut flowers. A B C, care American Florist.

WANTED—To buy the years 1881 1882 of the Garden, London, soiled or incomplete. Apply LONGPRE, 104 E. 84th St., New York City.

WANTED—By young man age 22, a position with a good rose grower, to learn the business; good character. Illinois or west preferred. H. GARWOOD, box 416, Oskaloosa, Ia.

WANTED—Young man with $1,000 to loan employer for light work with a florist. Security given for loan and permanent situation to man of ability. Address, W care American Florist.

WANTED—Single man of energy and ability for roses and cut flower stock. Address with terms and experience. J. T. WILLIAMSON, Prop. La Rose Gardens, Memphis, Tenn.

WANTED—A man for general greenhouse work who understands his business; wages $25 per month with board, or $45 without. Apply THOS. T. HOLTON, 81 South St., Morristown, N. J.

WANTED—For commercial place, good man on roses, carnations and violets; strictly sober. Call or address E. H. PRINCE, Room 15, 225 Dearborn St., Chicago.

WANTED—A man clever at bud cutting and propagating, etc. Must have best of references. None but thoroughly professional men need apply. Wages $26.00 per month (calendar), board and lodging. A N C, care American Florist, Chicago.

WANTED—A reliable married man; no children; must have the very best of references for honesty and diligence, to act as fireman in a large establishment where both steam, hot water, hot air and flues are used; fuel, coal and oil. Wages, $35.00 per month, cottage with garden for vegetables. A R C, care American Florist, Chicago.

TO RENT—6 houses in Chicago with 11,000 feet of glass, stocked with forcing stuff, roses, carnations, violets, smilax, etc. Address R P, care American Florist.

FOR SALE OR RENT—Three greenhouses in Evanston, Ill., size 20x60 ft., stocked with roses, smilax, etc. A good retail and bedding business transacted. W. J. DOWNES, 906 Sherman av., Evanston, Ill.

FOR SALE CHEAP—Second hand No. 1 Exelsior boiler, 18 sections, 25 horse power, as good as new; steam gauge, water gauge all complete. Price $300. This is half the price of new. Address J. G. BURROW, Fishkill, N. Y.

FOR SALE—3 greenhouses and stores fronting on one of the best business streets of Chicago. All well stocked, horse and wagon, 3 year lease paid up to March, 1894, right near public park. Proprietor is unable to tend to it. Price $2,500; half cash, balance in good secured notes. Address M, care American Florist.

FOR SALE—Florist business, consisting of 2 new greenhouses 100x23 feet and 50x16 feet, also new 9 room dwelling, all heated by the Furman steam boiler. Three lots, each 50x150 feet. Fine location in a rapidly growing city, 1 hour's ride from Chicago. Will be sold at a bargain on account of poor health. Apply to J. B. MOHERWELL, Masonic Block, Waukegan, Ill.

SPLENDID OPPORTUNITY—To let on lease for eight or ten years, a large property for greenhouses in most desirable locality; extra good home market, churches near by, street cars running past premises, and within twenty minutes' ride of public buildings. Address J. W. Moore, St. Vincents' Seminary, Germantown, Philadelphia, Pa.

FOR SALE.

Nice greenhouse in the most fashionable part of the city. Sell at a bargain. Cost to run it per month, including rent of $2.00, is $30.00. Receipts will average $200.00 per month, and can be increased. Good reasons for selling. Address W. B. LEEDY & CO., Birmingham, Ala.

FOR SALE.

An old established florist business, containing about 10,000 feet of glass, four large grape and four plant houses in good order, heated with hot water, steam pump, tanks etc. Property is free and clear. Terms easy; from 2 to 6 acres of land. 30 minutes from Grand Central Station, N. Y. City; 75 trains daily; 10 minutes from depot. This is a rare chance for the right party. For particulars apply to E. HUGGINS, Yonkers, N. Y.

FOR SALE.

In Andover, Mass. 5 Greenhouses and ½ acre of land. ¼ mile from depot, 1 block distant from electric cars. Good local trade, little competition. 21 miles from Boston, 3 miles from Lawrence. Address, Box 372, Andover, Mass.

FOR SALE.

Rider Pumping Engine, cost new $325.00, will sell for $100 cash; reason for selling, now have city water.

TIFTON & HURST, Little Rock, Ark.

FOR SALE.

The Oldest Seed and Florists' Store in New Orleans

on account of retiring from store business, a large selected stock and good patronage from the best class of customers in the city. Address

R. E. SIMONS, New Orleans, La.

FOR SALE OR TO RENT.

The following greenhouse property, situated on the outskirts of Springfield, the City of Houses, or will sell Greenhouses, Stock and Fixtures and give ten years' lease of 2 acres land. Ten houses in all—5 houses, 10 feet wide, 65 feet long; 4 houses, 18 feet wide, 65 feet long; 1 house, 18 feet wide, 65 feet long. Steam plant! New double Florida Boiler. Stock in good condition, with a large and extra good home market. This is an opportunity for a life time, as present owner has other interests to look after. If you are looking for a chance, apply at once to

N. D. WINTER,

5 Elm Street, SPRINGFIELD, MASS.

FLORISTS' HOSE

Made by E. W. Holt, member of the Society of American Florists.

Special Offer on Orders until May 15, '93

1.5 per cent on the following 1.5 per cent

¾ inch 3 ply Standard, 12 cents per foot

¾ inch 3 ply XX 15 cents per foot

4 ply 16 cents per foot

4 ply XX 20 cents per foot

⅝ inch hose 20 per cent less than above prices

1-inch hose 20 per cent more than above prices

Special Armored Hose ¾ inches, 12 and 15 cents net

Goodyear Rubber Store,

2 W. 14TH ST NEW YORK.

A RARE CHANCE.

For sale, on account of ill-health, a flower store, established since 1884, doing a good business in the flourishing city of Hoboken. Apply to

A. & E. ASMUS, 515 Washington St. **HOBOKEN, N. J.**

TAKE YOUR CHOICE.

FOR SALE—An old established Florist Business at Dorchester, Mass., comprising 20,000 feet of land centrally located, on which are: 1 house 120x20 filled with Carnations; 1 house 70x16 filled with Roses; 1 house 70x11 filled with Violets; 1 house 70x10 filled with Violets; 1 sash pit 70x7 filled with Violets; 1 dwelling house 7 rooms. Plants in good condition and houses in good repair. Price $6,000.

FOR SALE OR RENT—A well equipped establishment within eight miles of Boston, comprising 8 acres of land on which are 1 house 120x20 filled with Mermets and Silver Sprays; 1 house 100x24 filled with Wilders and Plants; 1 house 100x11 filled with Wilders; 1 house 100x11 filled with Adiantums, 9-in. pots; 1 house 100x11 filled with Cuttings Bouvardia; 1 house 100x11 filled with Callas, Bouvardia and Portia; 1 house 100x11 filled with Violets and Mignonette; 1 heated frame 100x6 filled with Mignonette; 1 propagating house 75 ft. long. Price $22,000.

FOR SALE—Eight miles from Boston, 1 acre of land, 8,000 feet of glass, including 4 houses, 100x18, 1 dwelling house 7 rooms. Apply to

N. F. McCarthy & CO. 1 Music Hall Place, Boston Mass.

FOR SALE OR LEASE.

Owing to poor health I offer for sale my florist establishment containing two acres of ground, dwelling house, barn and about 16,000 feet of glass heated by hot water. I will also lease to a reliable party. No better opportunity is offered for a man to establish himself in a paying business. For further information address

HANS NIELSON, St. Joseph, Mo.

ASSIGNEE'S PUBLIC SALE.

COTTAGE PLACE GREENHOUSES.

On Monday, May 29th, 1893, the undersigned assignee of A. Bitner and wife, will by virtue of an order of the Court of Common Pleas of Lancaster Co., Penn., sell at public sale at the Leopard Hotel in Lancaster, Penn., the celebrated Cottage Place Greenhouses, adjoining Lancaster, with city office No. 16 Center Square.

These well known greenhouses will be sold in two parts. The older plant, being all east of West street, consisting of 13 greenhouses, with about 30,000 square feet of glass, three large boilers, pumping engine, two stand pipes, containing 70,000 gallons, wells, pumps, steam heating pipes, etc., etc., together with boiler house, stable, wagon shed, and other necessary buildings.

Second; the new plant, consisting of a lot of ground, 236 feet front on the west side of West street, and 100 feet deep, on which are erected 10 greenhouses, with about 20,000 square feet of Callas and two large boilers in position. This plant is not finished, the pumping and heating arrangements not being completed.

A very accurate map of these properties can be seen at the office of W. F. Beyer, Esq., No. 43 Grant street which intending purchasers should consult.

Lancaster County, Penn., is recognized everywhere as the "garden spot" of the Union, and the soil of this locality is unequalled even in this county for the production of roses, carnations, and indeed all kinds of flowers.

The advantages for shipping are unexcelled, having both the Pennsylvania and the Reading systems, with all their connections.

To those desiring to enter the greenhouse business this sale offers the best possible opportunity.

Mr. A. Bitner, adjoining the premises, will show the properties.

Sale to begin at 7:30 P. M., when terms will be made known by

R. J. HOUSTON,
Assignee of A. Bitner and wife.

Golden Returns.

200,000 ROSES 200,000

We offer well established, healthy plants in below named and many other sorts:

From 2-inch pots, $ 3.00 per 100; $30.00 per 1000
From 3-inch pots, 6.00 " 60.00 "
From 4-inch pots, 12.00 " 120.00 "
Not in excess of any one variety.

50,000 Hybrid Perpetual Roses 50,000

at $4 per 100; $40 per 1000, in 50 select varieties.

New and Rare Varieties at Special Rates given in our Wholesale List, now ready.

WE NAME A FEW SORTS ONLY:

Aurora, Bosanquet, Comt. de Labarthe, Bon Silene, Cels, Devoniensis, C. Mermet, Etoile de Lyon, Hermosa, Mme. Cusin, H. M. Stanley, Malmaison, Marie Guillot, Mme. Lambard, Marie Lambert, Marechal Niel, Kruger, Niphetos, Mme. Jos. Schwartz, Safrano, Perle des Jardins, Sombreuil, The Bride, etc., etc.

For anything in the Florist line, or send your lists to be priced. Address

NANZ & NEUNER,
LOUISVILLE, KY.

MADAME CAROLINE TESTOUT.

The best rose of its color in existence. It has been fully tested in the New York market and

IT SELLS.

Healthy plants from 2½-inch pots now ready. Per 100, $25.00; per 1000, $200.00; 500 at 1000 rates.

ERNST ASMUS, West Hoboken, N. J.

ROSES FINE HEALTHY PLANTS FROM 2¼-INCH POTS.

Perles, Brides, Mermets, Niphetos, Papa Gontier, Hoste, Watteville, Cusin, La France, Albany, Wootton, at . $5.00 per 100, $45.00 per 1,000.
Meteor at . . . . . $6.00 per 100, $55.00 per 1,000.
Climbing Perle, at . . . . . $10.00 per 100.

John Henderson Co.,

FLUSHING, N. Y.

ROSES.

Good strong healthy plants, our selection, from 2½ inch pots, per 1,000, $25.00.

SMILAX

15 CENTS PER STRING.

Special quotations for the balance of the month on Waban, Wootton and Soupert roses from 2½, 3½ and 4½ inch pots. Also American Beauty from 4½ inch pots.

Write us for list of other varieties on hand and prices.

THE NATIONAL PLANT CO.
DAYTON, O., U. S. A.

The Grand New Forcing Rose,

"American Belle."

Prices and full particulars on application.
John Burton, Chestnut Hill, Philadelphia

WATTEVILLES,
METEORS,

BRIDESMAIDS

FRANK L. MOORE,
CHATHAM, NEW JERSEY.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST. . . . . .
ANCHORAGE ROSE CO., Anchorage, Ky.

ROSES.

We offer about 100,000 of the best varieties of Roses from 2 inch pots, good size and healthy stock. Also

10,000 Jacqueminot at $35.00 per 1,000, or $4.00 per 100.

BRIDESMAID.

2 inch pots, per 100, $0.00; per 50, $5.00; per 500, $40.00.

American Beauty	per 100,	$6.00;	per 1,000,	$55.00
White La France	"	5.00;	"	45.00
La France	"	4.00;	"	35.00
Mme. Pierre Guillot	"	4.00;	"	35.00
Petunias, double			per 100,	4.00
Verbenas, fine assortment,	per 100	$2.00;	per 1,000,	18.00

Send in your lists and we will quote lowest prices for anything in the Florist Line. Address

NANZ & NEUNER,
LOUISVILLE, KY.

ROSES.

PERLES, 2¼ inch, $5.00 per 100.
PERLES, 2¼ inch, $45.00 per 1,000.

JOHN BURTON,

Chestnut Hill, PHILADELPHIA, PA.

The New White Rose KAISERIN AUGUSTA VICTORIA.

From 3-inch pots, $25.00 per 100.

JOHN COOK,
318 N. Charles St., BALTIMORE, MD.

ROSES.

TEAS . . . . . $30.00 per 1000
HYBRIDS . . . . . 40.00 per 1000
Healthy plants, in 2-inch pots.
Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.
Trade list on application.

Jacob Schulz,
LOUISVILLE, KY.

ROSES.

Finest stock in Northwest

Duchess of Albany, La France, Catherine Mermet, Waban, The Bride, Mme. Hoste, Niphetos, Perle, Sunset, W. F. Bennett.

C. A. SMITH FLORAL CO.,
77 7th Street, South, MINNEAPOLIS, MINN.

Mention American Florist

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

A BOX of La France and Albany roses, containing three dozen large, handsome blooms with beautiful foliage, has been received from Mr. Grove P. Rawson, Elmira, N. Y., who writes that the flowers are a sample of average fair stock from cold house. He adds that much finer individual blooms could have been sent. While showing an occasional ragged petal on the outside the blooms averaged high both in shape and color. We presume these were cut from one of the houses Mr. Rawson runs solely for summer flowers, and believe some further notes from him on the growing of summer roses under glass would be of general interest. May we have them, Mr. R.?

THE SUPPLEMENT to our trade directory has been issued and a copy has been mailed free to each purchaser of our 1892 book. If you bought a copy of our edition of 1892 and have not received a copy of the supplement by the time this issue of the FLORIST reaches you kindly notify us of the omission. All future sales of the book will include a copy of the supplement without extra charge.

SECRETARIES of clubs should not fail to mail copies of premium lists, etc., to the secretaries of sister organizations. A complete "up to date" list, with full addresses, will be found in the supplement to our trade directory, a copy which has been mailed to the secretary of each club.

WE HAVE RECEIVED from the Texas Seed and Floral Co., Dallas, Texas, some very fine flowers of the Cape Jasmine (gardenia). They came through by mail in excellent condition.

PLEASE WRITE on your printed letter head when addressing our advertisers. If you have no printed letter head, then enclose your business card or bill head.

DO YOU WANT a list of the leading cemetery superintendents? You will find such a list in our new trade directory and reference book.

DO YOU WANT a list of the leading park superintendents of America? You will find such a list in our trade directory and reference book.

THE AMERICAN FLORIST and *Gardening* together to one address for $1.75. Send orders to the American Florist Co.

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

Cape Jasmine Buds,
$1.00 per hundred, packed.
CUT FERN LEAVES AND MAGNOLIA BUDS.
MRS. N. E. WESTGATE & SON,
Wholesale Growers, Houston, Texas.

Have you noticed the scarcity of

WHITE CARNATIONS?

Now is the time when Cape Flowers, Immortelles, etc., become indispensable for Funeral and other made up work.

In Cape Flowers we are the leading dealers in this country. Our stock is the largest; it is all fresh, and you can depend upon the quality.

On these goods as well as on all Decoration Day supplies, Commencement Baskets, Jardiniers, Metal Wreaths, Wheat Sheaves, etc., we make bottom prices.

We are large manufacturers of these goods, and we sell no goods at retail.

PRICE LISTS ON SPRING SUPPLIES NOW READY.

H. BAYERSDORFER & CO.,
56 N. FOURTH STREET. PHILADELPHIA, PA.

ORCHIDS

I am handling the finest stock of Cut Orchids grown in this country and can supply them in any quantity. Also all other Choice Flowers.

T. J. CORBREY,
WHOLESALE AND COMMISSION FLORIST,
45 LAKE ST., CHICAGO.
CONSIGNMENTS SOLICITED.

Asparagus Plumosus Nanus.
CUT STRINGS: 6 to 10 feet long, 50 cents each. 12 to 18 feet long, $1.00 each.
In large or small quantities all the year round. The largest stock in the country.
W. H. ELLIOTT, Brighton, Mass.

WHOLESALE FLORISTS
La Roche & Stahl
N. E. CORNER 13th & Chestnut Sts., PHILADELPHIA.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE FLORIST,
1122 PINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STEET,
St. Louis, Mo.

SAMUEL S. PENNOCK,
Wholesale Florist
REMOVED TO REAR OF 42 S. 16th ST.,
Philadelphia, Pa.

THE SMILAX KING!
Who? KOFFMAN,
Where? WALDEN, Orange Co., N. Y.
What? **SMILAX**
25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.
When? ALL THE YEAR AROUND.
And he pays the Express.

MARSCHUETZ & CO.,
FLORISTS' • SUPPLIES
23 & 25 N. 4th St., PHILADELPHIA, PA.
Send for Catalogue.

E. H. HUNT,
WHOLESALE FLORIST

79 Lake Street, CHICAGO.

	Per 100
Perle, Gontier, Niphetos	$3.00@$4.00
Mermets, La France, Bride, Wootton	4.00@ 5.00
Meteors	8.00
Jacqs	12.00
Carnations, short	1.00
" long	1.50@ 2.00
Valley, Tulips, Daffodils	3.00
Violets, Adiantum	1.00
Callas, Harrisii	8.00@10.00
Smilax	18.00@20.00
Asparagus Plumosus	50.00

In effect till next issue of this paper.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,

34 & 36 RANDOLPH STREET,

CHICAGO, ILL.

WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in

FLORISTS' SUPPLIES,

116 Dearborn Street, CHICAGO.

Store Closes Nights 9 P. M.; Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.

WHOLESALE GROWERS OF

CUT FLOWERS of ALL KINDS

and Dealers in FLORISTS' SUPPLIES.

CHAS. W. McKELLAR, Mgr.

In Chicago Cut Flower Exchange,

45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,

66 WABASH AVENUE,

Telephone 4786. CHICAGO, ILL.

T. J. CORBREY
Wholesale and Commission

FLORIST,

45 Lake St., CHICAGO, ILL.

In Chicago Cut Flower Exchange. . . .

A. G. PRINCE & CO.,
Wholesale and Commission

FLORISTS,

45 LAKE STREET,

In Chicago Cut Flower Exchange. CHICAGO.

DAN'L B. LONG,
COMMISSION • FLORIST,

495 Washington St., BUFFALO, N. Y.

FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.

Lists, Terms, &c. on application.

WILL BE READY FOR SHIPMENT SOON.

Water Lily Blossoms,
Cape Jasmine Blossoms,

ORDERS SOLICITED NOW.

WISCONSIN FLOWER EXCHANGE, Milwaukee, Wis.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

Wholesale Market.

Cut Flowers.

NEW YORK, May 16.

Roses, Gontier, Perle, Niphetos	1.00@ 2.00
" Mermet, Bride, Hoste	1.00@ 3.00
" Cusin, Watteville, Meteor	1.00@ 5.00
" Bridesmaid, La France	2.00@ 5.00
" Jacqueminot	3.00@10.00
" Beauty, Hybrids	5.00@20.00
" Mme. Caroline Testout	5.00@15.00
Carnations	.50@ 1.00
Valley	1.00
Longiflorum	2.00@ 5.00
Cattleyas	50.00
Mignonette	1.00@ 4.00
Adiantums	1.00
Smilax	15.00@25.00
Lilac (bunch)	.65

BOSTON, May 16.

Roses, Niphetos, Gontier	3.00@ 4.00
" Perle, Souset	3.00@ 4.00
" Bride, Mermet	3.00@ 6.00
" Jacq., Hybrids	10.00@15.00
Carnations	1.00@ 2.00
Violets	.50
Longiflorum	4.00@ 6.00
Candidum	3.00@ 4.00
Lily of the valley, tulips, daffodils	2.00@ 3.00
Mignonette	2.00@ 3.00
Pansies	.25
Adiantum	1.00
Smilax	17.00@25.00
Asparagus plumosus	50.00@100.00

PHILADELPHIA, May 16.

Roses, Brunners	15.00@25.00
" Talisman	15.00@20.00
" Beauties	15.00@25.00
" Belles	25.00
" La France	3.00@ 4.00
" Mermet, Bride	4.00@ 5.00
" Cusin, Watteville	3.00@ 4.00
" Jacqs	8.00@10.00
" Perle, Gontier	2.00@ 3.00
Valley	1.50@ 2.00
Carnations	.75@ 1.50
Mignonette	1.00@ 2.00
Asparagus	40.00@50.00
Smilax	20.00@25.00
Adiantum	1.00@ 1.25
Harrisii	5.00@ 6.00
Callas	5.00@ 8.00
Sweet peas	1.00@ 2.00
Cypripedium Lawrenceanum	.15

CHICAGO, May 16.

Roses, Perles, Niphetos Gontier	3.00@ 4.00
" Mermet, La France, Albany	4.00@ 5.00
" Brides, Wootton Bennett	4.00@ 5.00
" Beauties	10.00@15.00
" Jacqs	12.00@18.00
" Hybrids	12.00@18.00
Carnations (short)	.75@ 1.00
" (long)	1.50
" (fancy)	2.00
Callas, Harrisii	10.00
Romans, Valley	3.00
Violets	1.00
Sweet Peas	1.00@ 1.50
Paeonies	12.00
Daffodils, tulips	3.00@ 4.00
Smilax	20.00

Peck & Sutherland,
Successors to WM. J. STEWART,

Cut Flowers AND Florists' Supplies

WHOLESALE.

67 Bromfield Street, BOSTON, MASS.

WHOLESALE FLORISTS,

JOBBERS IN . . .
. . FLORISTS' SUPPLIES,
FLORISTS' VASES.

METS, BRIDES, GONTIERS, CARNATIONS, ALWAYS ON HAND.

1 Music Hall Place, BOSTON, MASS.

HORTICULTURAL AUCTIONEERS. . .

WELCH BROS.,
Wholesale Florists,

NO. 2 BEACON STREET,

Near Tremont St., BOSTON, MASS.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

BURNS & RAYNOR,
49 West 28th Street,

NEW YORK,

WHOLESALE DEALERS IN AND SHIPPERS OF

Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE

FLORIST,

32 West 30th Street, NEW YORK.

Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN

CUT FLOWERS

51 W. 30th St., NEW YORK.

FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,

117 W. 30TH ST., NEW YORK.

The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE

FLORIST,

111 WEST 30TH STREET,

NEW YORK CITY.

Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,

5 WEST 27TH STREET,

NEW YORK.

BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist

113 WEST 30TH STREET,

. . . NEW YORK.

The finest Roses, Violets and Carnations

Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,

Wholesale Florist

Careful Shipping to all parts of the country. Price list on application.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST

4TH & WALNUT STREETS,

Cincinnati, O.

GEO. MULLEN,
WHOLESALE FLORIST

Florists' Supplies Always in Stock.

7 PARK STREET,

BOSTON, MASS.

Orders by Mail, Telegraph, Telephone or Express promptly filled.

The Seed Trade.

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. HON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1893. Applications for membership should be addressed to WM. Meggatt, chairman membership committee, Wethersfield Conn.

Turnip vs. Onion.

ED. AM. FLORIST:—The article entitled "Turnip Seed," from the Quaker city, was undoubtedly sent to your most valuable paper with the feelings and intentions of a philanthropist. But the facts are this valuable information was already in the hands of most dealers many weeks ago. It would appear to me that this kind hearted gentleman should have published the article earlier to allow us all an equal chance to purchase a few hundred pounds before such a sharp advance should have befallen the turnip.

I recall, while in France last summer, the heavy purchases of turnip by dealers from the Quaker City at prices that would not admit of a profit over the prices at which certain Philadelphia dealers were selling. It is with much pleasure that I note that one firm, at least, intends making a profit this year. It is quite probable that one dealer from the Quaker City has sufficient turnip seed to supply his trade. Surely the article was not written with the intent of booming(?).

I can not refrain from saying that if this article on turnip will bring money results such as the exertions of the two seed sharpers brought the seed trade generally on onion seed, we will all have money to spend at our annual meeting in Chicago, August 14.

CHARLES P. BRASLAN.

LATEST REPORTS from Haarlem, Holland, show that the continued drought of about eight weeks duration has, in certain sections greatly damaged the growing crops of hyacinths, tulips and crocus.

MR. F. BARTELDES will make a California trip in company with Mr. C. P. Braslan.

MR. MAX WILHELMI of F. Barteldes & Co. visited Chicago.

J. C. VAUGHAN is on an eastern trip.

DENVER, COLO.—The Denver Florist Co. now has sixteen greenhouses, of which ten are 18x100, three 11x100, two 12x150, and one 9x150. Six of the houses are devoted to roses, three to carnations, and the remainder to violets, chrysanthemums, etc. The plant is heated by two steam boilers of 70 and 32 horse-power respectively, and a hot water boiler for propagating house. Water is obtained from an artesian well 750 feet deep. The Co. also has 80 acres of fruit, which is irrigated by water from an adjoining lake, steam from the greenhouse plant supplying power for the pump.

We Sell Bulbs!
Special Prices on Application.
Weeber & Don
Seed Merchants and Growers,
114 Chambers St, NEW YORK.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

We Grow.....
BULBS
SEGERS & CO., BULB GROWERS,
LISSE near HAARLEM, HOLLAND.
Catalogues will be mailed free upon application if not received.

GT. VAN WAVEREN & KRUYFF,
— Special Growers of —
Dutch Bulbs & Flower Roots.
Mr. Gerard Kruyff has come personally to make a trip through the United States, to contract with buyers, and offers a large stock of first quality goods. Parties interested in the Bulb trade are requested to correspond. Send lists for estimates to
Gerard Kruyff,
ASHLAND HOUSE, FOURTH AVE., NEW YORK CITY.

R. VAN DER SCHOOT & SON,
HILLEGOM, - HOLLAND,
Largest Growers of
HYACINTHS, TULIPS, NARCISSUS,
SPIRÆA, LILIES OF THE VALLEY, ETC.
HEADQUARTERS FOR HIGH GRADE FORCING BULBS.
Wholesale Importers should write us for Prices.
OUR NEW TRADE LIST NOW READY.

HULSEBOSCH BROS.,
BULB AND PLANT GROWERS,
OVERVEEN, near Haarlem, HOLLAND.

	Per 100	1000
Lilium Harrisii, 4 to 5-inch in circ.	$2.20	$19.00
" " 5 to 7-inch in circ.	3.00	24.00
" " 7 to 9-inch in circ	5.25	45.00
" " 9 to 12-inch in circ	11.00	100.00
Lilium Longiflorum 10 per cent dearer than Lilium Harrisii.		
Roman Hyacinths, extra selected	2.50	22.00
" " " top roots	3.00	25.00
Narcis. Totus Albus, extra selected	1.00	7.50
" " " Grandiflorum, ext. s'le'd	1.30	11.00

Fall Wholesale Catalogue now ready. Address
A. HULSEBOSCH,
P. O. Box 3118. Warehouse 58 West Street,
NEW YORK CITY.

DUTCH BULBS.
HYACINTHS, TULIPS, NARCISSUS, ETC. FIRST QUALITY IS THE BEST.
I have gained the reputation of having the finest bulbs of Holland, and if you would have the VERY BEST send me a trial order.
Two important items, viz:
Quality the Best, Prices the Lowest.
Price list free on application.
JOHN BARTH BOS,
Bulb grower, Established 1868.
Overveen near Haarlem, Holland.

LILIUM HARRISII.
Original and largest growers of this important bulb.
OUR SPECIALTY!
True Stock. Lowest Prices. Best Quality.
F. R. PIERSON CO.,
TARRYTOWN-ON-HUDSON, NEW YORK.
Mention American Florist.

BENJAMIN RIMBAUD, BULB GROWER,
Quartier du Temple, Toulon, var, France.
Cable address Benrimbaud, Toulon.
The largest cultures in the South of France, of WHITE ROMAN HYACINTHS, Narcissus P's per White grandiflora, N. Double Roman, N Double Von Sion, true pure yellow, and other Daffodils. Lilium Candidum, the largest bulbs. Freesias, Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A. Double Rosette the earliest, etc. Prices on application.

Send for Catalogue of
JAPAN BULBS, SEEDS, AND SHRUBS.
ARAUCARIAS,
AUSTRALIAN Palm Seeds,
CALIFORNIA BULBS AND SEEDS to
H. H. BERGER & CO.
ESTABLISHED 1878. SAN FRANCISCO, CAL.

TUBEROSES.

☞ We are headquarters.	Per 100.	Per 1,000
1st size Dwarf Pearl	$1.50	$12.00
2d size "	80	6.50
1st size Tall Pearl	1.20	10.00
Gladioli, extra large, finest sorts	1.25	12.00

H. G. FAUST & CO.,
64 and 66 N. Front St., PHILADELPHIA, PA.
WOODLAWN FARMS, 1,500 ACRES.

Lily of the Valley Bulbs.
THE STAR BRAND
SPECIALLY RECOMMENDED FOR LATE FORCING.
We are now booking import orders for shipment from Hamburg in October or November.
REISS & BRADY,
230 Washington Street, New York.

SEGERS BROTHERS

Offer HYACINTHS, TULIPS, DAFFODILS,

And all other bulbs for forcing and outdoor, in very fine quality, at reasonable rates.

If any of our friends have not received a copy of our Catalogue of 1893, should write for one at once.

Please ORDER ON RECEIPT of our catalogue.

SEGERS BROTHERS,

WHOLESALE BULB GROWERS,

LISSE, near Haarlem, **HOLLAND.**

IF YOU NEED ANY

Cape Flowers, Immortelles, Grasses, plain or fancy **Baskets, Metal Wreaths, Letters, Doves,** or any other thing in the Florists' supply line, mail us your order.

REMEMBER WE ARE THE

Leading Manufacturers of Wheat Sheaves and Baskets, and Importers of **Florists' Supplies.**

Catalogue on application.

ERNEST KAUFMANN & CO.,

113 N. 4th Street, PHILADELPHIA, PA.

Choice Dutch Bulbs

AND NEW VARIETIES OF ATTRACTIVE BULBOUS PLANTS, GROWN BY

C. G. VAN TUBERGEN, JR.,

Haarlem, Holland.

For Fall Importation, catalogues free on application to his sole agents

C. C. ABEL & CO., P. O. Box 920, New York.

Choice Lily of the Valley Pips.

Ernst Reimschneider, Attona, Hamburg.

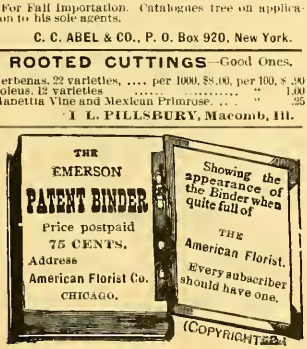
For Fall Importation. Catalogues free on application to his sole agents.

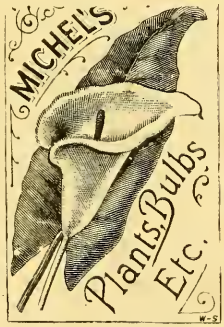
C. C. ABEL & CO., P. O. Box 920, New York.

ROOTED CUTTINGS—Good Ones.

Verbenas, 22 varieties, ... per 1000, $8.00, per 100, $ .80
Coleus, 12 varieties ..... " 1.00
Manettia Vine and Mexican Primrose. .... " .25

I. L. PILLSBURY, Macomb, Ill.





Write for Wholesale List.

MICHEL PLANT AND BULB CO.,

ST. LOUIS, MO.

Fresh From Japan.

Sound Bulbs of

Lil. Auratum, 7 to 9 inch, $9.00 per 100.
Lil. Rubrum, 7 to 9 inch, $9.00 per 100.

Import prices on first class Fall Bulbs way down.

W. W. BARNARD & CO.,

6 and 8 N. Clark St. CHICAGO.

G. J. MOFFATT,

Manufacturer of

PAPER BAGS AND ENVELOPES

Special attention given to

Seed Bags and Catalogue Envelopes.

NEW HAVEN, CONN.

Kills Mildew and Fungus Growth. What does?

GRAPE DUST.

Sold by Seedsmen.

Mention American Florist.

Siebrecht & Wadley,

ROSE HILL NURSERIES,

NEW ROCHELLE, N. Y.

Palms,

ORCHIDS

Roses,

and New Plants.

FRESH DRACAENA CANES NOW READY.

ORCHIDS.

The Finest Stock in the World.

SANDER'S,

ST. ALBANS,

ENGLAND.

Thirty minutes from London.

Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City.

Orchids Cheap as Good Roses.

BRACKENRIDGE & CO.,

Established 1854. **Govanstown, Md.**

PRICE LIST FREE.

1,000,000 CANE STAKES

CHEAP OFFER OF DUTCH BULBS.

4,000 Hyacinths; 3,000 Narcissus; 4,000 Double and Single Tulips; 5,000 Crocus; 20,000 Gladiolus Colvilli, white; 2,000 Gladiolus, red; 3,000 Lilium umbellatum, mixed; 1,000 Lilium tigrinum splendens; 500 Lilium Thunbergianum, 500 Harrisii; 1,000 Spiræa Japonica. Write for condition to

H. KNOOP, Bulb Grower,

WARMOND (near Haarlem), HOLLAND.

D. H. ROBERTS,

159 & 161 South 5th Ave., New York

NATURAL GAS MADE GLASS

for Rose Houses, Conservatories, etc., etc.

Our glass received the highest award at the Boston Convention of the S. A. F.

Recent Legal Decisions.

Liability on Acceptance of Goods not Ordered.

Though a person may not order goods, yet if he takes them out of the possession of the carrier and has them hauled to his own place of business, instead of notifying the shippers of their mistake in sending them to him, or declining to receive them from the carrier, in other words, if he receives and appropriates such goods he is bound to pay for them, whether he made any bargain for their purchase or not.

Indiana Manufacturing Co. vs Hayes. Supreme Court of Pennsylvania. 26 at Rep. 6.

Effect of Certification of Bank Check.

It seems to be well established that as a general rule the certification of a check in the hands of the payee, the body of which is unaltered, releases the drawer from further liability, and creates a direct liability from the bank to the payee, while as between the bank and the drawer it operates as a payment, to that extent, on his account; and although, prior to its being certified, the check may be countermanded by the drawer, after its certification it has passed beyond his control, and he no longer has power to countermand its payment.

Meridian Nat. Bank vs First Nat. Bank. Appellate Court of Indiana. 33 N. E. Rep. 247.

Liability of Common Carriers for loss or injury of freight.

A common carrier, must pay the market value, at the point of destination of all property intrusted to it for transportation, which, through its fault, is lost or destroyed, and is not delivered. The law, also, is that if a carrier receives property for transportation, and delivers it at the end of its route, but through its fault it is damaged, and it fails to deliver it in the same condition as when received, it must pay the difference between the value of the property in its damaged condition, at the point of destination, and what the value of the property would have been at that place if delivered in the same condition as when it was received for transportation.

New York, L. E. & W. R. Co. vs Estill. Supreme Court of the United States. 13 Sup. Ct. Rep. 444.

WHEN SENDING US newspapers containing items you wish us to note please do not fail to distinctly mark the item so it can be easily found, as we can not spare the time to hunt through the mass of papers sent us for unmarked items.

* Rooted Cuttings. *

COLEUS FOR YOU ALL!

Golden Bedder and Crimson Verschaffelti specialties, $6.00 per 1000. Fuchsias, Storm King, Moles Worth, E. G. Hill, Phenomenal, Jupiter, Black Prince, and others, $1.00 per 100. Ageratums, dwarf, blue and white, 75c per 100. Heliotrope, 4 sorts, $1.00 per 100. Few Blue Standard Dwarf, $1.50 per 100, from flats $1.50. Pansies, Hybrid, Butterfly and Trimardeau, seed bed 40c per 100, transplanted, 60c per hundred.

CASH WITH ORDER.

J. C. FELTHOUSEN,

SCHENECTADY, N. Y.

TRY DREER'S GARDEN SEEDS,

ESTABLISHED 1838 DREER'S SEEDS FRESH & RELIABLE

Plants, Bulbs & Requisites. They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.

HENRY A. DREER, Philadelphia, Pa.

The three leading Florist Flowers:

CHRYSANTHEMUMS, CARNATIONS AND ROSES.

ALL THE NEW AND SELECTED STANDARD VARIETIES. . . .

My stock of all are as fine as can be produced at reasonable rates. Complete list of these will be mailed to all applicants in the trade.

JOHN N. MAY, Summit, N. J.

CUTTINGS

Carnations- Lizzie McGowan, Grace Darling and Aurora.
French Canna—A fine assortment of the best varieties only at $4.50 per 100, or $35.00 per 1000.
Pansies—Small blooming plants $1.75 per 100, or $15.00 per 1,000. Magnificent strain.

Terms Cash. Correspondence Solicited.

ALBERT M. HERR, Lock Box 496, Lancaster, Pa.

Carnations All Sold

We still have some Fine Plants of

The Best Yellow Canna. NELLIE BOWDEN, 75c each. $8.00 per dozen

JOHN McGOWAN, - - Orange, N. J.

New Carnations.

We have about 6,000 well rooted plants in 1½ inch pots of our new varieties, Wm. Scott and some of Mrs E. Reynolds, Western Pride and Dr. Smart.

Wm. Scott received first honors as best pink, where ever shown at the fall shows, at New York Cincinnati and Indianapolis. Also certificate of merit at the Pittsburgh Carnation Convention.

It has proven of such easy propagation that we have more plants than we expected. Will sell plants from pots same rate as rooted cuttings: $10.00 per 100; $75.00 per 1,000.

FRED DORNER & SON,

LA FAYETTE, IND.

CARNATIONS.

A SPECIALTY.

Full stock of all the new and leading varieties. Rooted Cuttings, Young Plants, and Field Grown Plants in season. Get our prices before purchasing.

GEO. HANCOCK, GRAND HAVEN, MICH.

STOP!

Consider. Can you use more carnations. If so, here is a chance to get them very CHEAP. I offer the following set of rooted cuttings for $5.00, cash: 200 Lizzie McGowan, 150 Hinze's White, 100 Nellie Lewis, 100 Garfield, 100 Mrs. Fisher, 50 White Dove, 25 Buttercup, 25 J. J. Harrison, 25 Portia and 25 Wm. Swayne.

E. B. LEWIS,

LOCKPORT, N. Y.

Mme. Crozy Cannas.

From 4 inch pots, ready to flower, $1.00 per hundred, cash.

I. I. POWELL, Millbrook, New York.

NEW BEDDING BEGONIA THURSTONII.

Strong plants, $1.00 per dozen; $6.00 per hundred.

I. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

Gladiolus, light shades predominate $1.00 per 100.
Alternanthera, red and yellow good stock, $2.50 per 100.
Centaurea Gymnocarpa, good stock, $3.00 p 100.

McCrea & Cole, Battle Creek Mich.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

W. R. SHELMIRE,

Carnation Grower

AVONDALE, CHESTER CO., PA.

Send for price list of Rooted Cuttings.

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

GRACE BATTLES

and over 60 other varieties of

CARNATIONS

offered the Wholesale Trade.

My list embraces the best Standard and New kinds including some of particular interest to growers of seedlings. Correspondence and personal inspection solicited. C. J. PENNOCK,

The Pines, Kennett Square, Chester Co., Pa.

ROOTED CUTTINGS

of the Best Old and Most Promising new varieties of

CARNATIONS.

Write for a catalogue and send list of wants for an estimate.

J. J. Styer, CONCORDVILLE, PA.

ROOTED CUTTINGS of CARNATIONS

By the Wholesale.

Ready now. This is the best time for intending buyers to supply themselves, offer them at moderate prices. Send for Price List. Address

JOSEPH KENARD, Unionville, Chester Co., Pa.

CARNATION CUTTINGS.

Healthy stock well rooted, ready to ship now.
Hinze's White . . . per 100, $1.25; per 1000, $8.00
L. L. Lamborn . . . " 1.00 " 7.50
W. L. Dreer . . . " .50 " 3.50

THOMAS DeWITT,
(Successor to DeWitt Bros.) BRISTOL, PA.

Mention the American Florist when writing to advertisers on this page.

Cape Flowers, new crop in best white quality at $1.00 the lb.; 10 lb. lots, $9 net.

Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 28-in. upwards, at 40c., 45c., 50c., 60c., 75c. and $1.00 each, according to length.

Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.

Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.

Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc. For prices consult our

Trade Catalogue, mailed free.

August Rölker & Sons,
136 & 138 W. 24th St., P. O. Station E. **New York.**

Do You Use Ferns?
Finest and Cleanest in the Land.
Hardy Dagger Cut $1 per 1,000.
G. W. CURREY & CO.
Give us a trial. NASHVILLE, TENN.

Surplus Stock
FOR HALF PRICE.
2,000 Fancy Leaved Caladiums from 2½-inch pots, 15 kinds, assorted, in lots. $5.00 per 100.
Blue African Water Lilies from seed pans at $1.00 per dozen. Other aquatics in proportion.
Coleus and Alternantheras dirt cheap.
Address **F. J. ULBRICHT,**
P. O. Box 655, ANNISTON, ALA.

E. G. HILL & CO.,
Wholesale Florists,
RICHMOND, INDIANA.

Mexican Primroses (Enothera Rosea).
Fine plants, per 100, Apple Blossom, $3.00; Hermosa tinted, $3.00; Cooperia Pedunculata, 1st size, $3.00; 2nd size, $2.50; Cooperia Drummondii (ready in May) $1.50; Zephyranthes Andersonii Texana (May), $1.50; Crinum Zeylanicum, C. Careyanum, C. Sanderianum, C. Latifolum, $2.00 each, $20.00 dozen.
Carriage paid when cash accompanies order.
MISS LIZZIE FREEMAN,
1203 East Ave., AUSTIN, TEXAS.

Cyclamens.

	Doz.	Hundred.
Select strains, in 3½-in pots	$1.00	$8.00
H. P. Roses, Select named kinds....	1.50	10.00
Smilax, stocky, well-hardened Seedlings, ... per thousand,	6.00	.75

F. A. BALLER,
BLOOMINGTON, ILL.

WORLD'S FAIR ACCOMMODATIONS
Members of the trade visiting Chicago during the World's Fair can find good, clean lodgings within short distance of World's Fair entrance at one dollar per day. Address manager
CHICAGO CUT FLOWER EXCHANGE
45 LAKE STREET.

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

ROSES.

MD. CAROLINE TESTOUT—The beautiful new hybrid Tea Rose, $25.00 per 100; $200.00 per 1,000,

HEINRICH SCHULTHEIS—An excellent pink hybrid Remontant Rose for very early forcing, $7.00 per 100; $60.00 per 1,000.

Chrysanthemums.

MRS. CRAIG LIPPINCOTT—Awarded a silver medal at Philadelphia, November, 1892. Yellow in color, VERY EARLY; large flower, broad petals. $3.00 per dozen.

TUXEDO—A beautiful orange colored flower, the best of this color for cut flowers. This should be grown in large quantities, so that the admirers of the Princeton College boys can get a color to their taste. $1.50 per dozen; $10.00 per 100.

EDWIN LONSDALE,
CHESTNUT HILL P. O. PHILADELPHIA, PA.

BOUQUET GREEN, • • • • • • • HARDY CUT FERNS.
EVERYTHING GREEN
At **H. E. HARTFORD'S,**
18 Chapman Place. **BOSTON.**

✻ Established Orchids. ✻

CATTLEYA TRIANÆ, fine selected stock, well established in 6 inch pots, and will produce four to eight flowers each next winter. Many of them are very choice varieties. Single plants, $2.50, twelve for $25, one hundred for $175. **CATT. GASKELLIANA,** extra well furnished plants in fine condition, and will produce in June next 6 to 10 flowers each. Single plants, $2.50, twelve for $25. **CATT. MOSSIÆ,** the finest cattleya for color and size yet introduced. Splendid plants, well furnished with flower sheaths and will produce 6 to 10 flowers each plant in May. $3 each or $30 per dozen. A large consignment of **EAST INDIAN ORCHIDS** will shortly arrive. Among them will be a grand lot of **Cypripedium Insigne,** collected in the original district from which all the choicest varieties have come. Also **Dendrobium Nobile, Dendrobium Farmerii, Dendrobium Chrysotoxum, Dendrobium Thyrsiflorum, Dendrobium Aureum, Dendrobium Densiflorum, Dendrobium Devonianum, Dendrobium Cambridgeanum** and other choice species. Particulars later.

IG. FORSTERMAN, NEWTOWN, N. Y.

Rooted Cuttings of Evergreens, Hardy Flowering Shrubs and Hardy Perennials (Achiliea, iberis, etc.) raised on contract for spring delivery. SEND LIST OF WANTS.
. . . ISAAC C. ROGERS, MOORESTOWN, N. J.

DO YOU WANT ANY?

	Per 100.	Per 1000.
Ivies English, one year old.....	$5 00	$40 00
Alternanthera, red or yellow.....	3 00	25 00
Echeveria Glauca, 2-2½-inch diam....	3 00	25 00
Daisies, hardy red or white.....	3 00	25 00
Pansies, strong plants, good strain....	3 00	25 00
Coleus, rooted Golden bedder and Verschaffeltii.....	1 00	7 50

Sweet Pea seed, our own growing, finest varieties mixed 65c. per pound. (Cash must accompany all orders.)
JOHN RECK, Bridgeport, Conn.

GERANIUMS.
Fine plants and varieties, 4 inch pots, per 100, **$7 50.**

Tuberous Begonias, per 100, **$3.00** and **$2.50,** Should be ordered now.

BRAUER & RICHTER,
McCONNELSVILLE, OHIO.

FARFUGIUM GRANDE.
First-class plants. Price $8.00 per 100; $1.25 per dozen, by mail. Postage prepaid.
TILTON BROTHERS, 222 Grove St., Aurora, Ill.

VERBENA SEEDLINGS,
PHLOX, MARGUERITE CARNATIONS.
If you need any of these it will pay you to write to
W. J. ENGLE, Box 211, Dayton, O.

Always mention the American Florist when writing to advertisers.

Association "Flora"
BOSKOOP, HOLLAND.
Now on hand in New York:
CLEMATIS, 3 Years, per 100, **$30.00**
H. P. ROSES, for forcing, " **9.00**
In the best variety, as Alfred Colomb, Anna de Diesbach, B Rothschild, Fisher Holmes, Gen. Jack, La France, Mme. G. Luizet, Mme. Plantier, Magna Charta, Paul Neyron, P. C. de Rohan, Merville de Lyon, Perle des Blanches, Ulrich Brunner and other sorts. Azaleas, Rhododendrons, Spiræas, etc. We also have Palms, Dracænas, Araucarias and Bay Trees at our nurseries in Holland. Catalogue on application.
P. OUWERKERK, 206 Cambridge Ave.,
JERSEY CITY, N. J.

MAGNOLIAS
OBOVATA GRACILIS AND PURPUREA.
Fine, bushy plants, 3 to 8 feet, from $25.00 to $200.00 per 100.
Send for descriptive catalogue and wholesale price list free to all in the trade.
SAMUEL C. MOON,
MORRISVILLE, Bucks Co., PA.

PANSIES——SMILAX
Large stock pansies in bloom; very best strains; just right for Decoration day, $2.00 per 100 by express. Speak quick. Also immense stock strong seedling smilax, ready for 2 inch pots, by mail, 50c per 100, or $4.00 per 1,000. No order filled for less than one dollar. Cash with order. Address
H. COLCLOUGH, Mount Pleasant, Ia.

Toronto.

Trade here just now seems to be pretty slack, and prices of the various staples in the cut flower line are gradually dropping, although from what I hear there is not likely to be such a slaughter in the price of roses as there was last spring; the different growers are inclined to combine in order to prop prices up.

There is considerable doing in nursery stock now and several florists have been going into it more largely than they usually do; it is not a bad line to take up between times, and those who have taken it up seem to be well satisfied with results.

Mr. A. H. Ewing returned from Chicago last week, having been sent for to resume the pressing spring work at the Normal School gardens. He speaks most highly of everything connected with the World's Fair, and tells every one that they ought to go and see it for themselves if they have to spend their last bottom dollar to get there. He says that as far as he saw Ontario has as well (in some respects better) grown plants as any in the Horticultural building of their sort, and as these plants nearly all come from Toronto, the boys here are feeling considerably elated about it. He gives a sad tale though of many beautiful crotons that were despoiled of their glory through having been taken from their warm habitats too early in the season. He says that no crotons were ever seen in better color and health than those sent from Jay Gould's place for the New York state exhibit. Mr. Ewing will probably return to Chicago in the fall. Mr. Wm. Houston will look after the exhibit for a short time longer, and as soon as the busy season is over some of the other boys will each take their turn. Mr. Ewing says there is very little difference in vegetation between here and Chicago, not more than two or three days in favor of Chicago.

People here are all complaining of a very backward season, however, last week was quite warm and things have been advancing rapidly. A.

"CHRYS-COLA"

Rooted Coleus.

Verschaffeltii, Golden Verschaffeltii, Hero, Yeddo, Golden Bedder, Chapmani, Firecrest, J. Goode, Chicago Bedder. Cash with order.

75c per 100; $6.00 per 1,000.

Rooted Chrysanthemums.

$1.75 per 100; $15.00 per 1 000.

Send for list of varieties.

S. B. FIELD, ROSELLE, N. J

CANNAS.

Mixed Varieties, dry roots, $3.00 per 10 ; $20.00 per 1,000.

HYDRANGEAS.

The Largest and Best Stock in the West.

RED BRANCHED, HORTENSIS and OTAKSA.

From 3 inch to 12 inch pots. Crowded for room and will sell reasonable.

JOHN C. URE,

ARGYLE PARK, ILL.

Mention American Florist.

Echeveria Secunda Glauca.

Fine plants, $3.00 per 100; extra, $4.00 per 100.

Schubertia Grandiflora.

A magnificent summer climber, with large waxy white fragrant flowers, $1.50 per doz.; $10 per 100.

Papyrus Antiquorum.

(Egyptian Paper Plant). Strong plants, 2½ inch pots, $1.50 per doz.; $10 per 100.

Canna Alphonse Bouvier.

The Novelty of the Season, and J. D. Cabos, $5 per dozen.

Sanchezia Nobilis Variegata.

Grand new bedding plant. Strong plants, 4 inch pots, $2 per dozen.

CASH WITH ORDER.

WILLIAM TRICKER, Dongan Hills, S. I., New York.

CANNA EXPLORATEUR CRAMPBEL

Flower as large as BOUVIER; color a clear vermilion scarlet, tinted with crimson spots distributed evenly over the petals. Flower spikes large. We claim it to be the largest and most showy deep red flower of all the new Crozy kinds. Per dozen, $6.00; per 100, $40 00.

ALPHONSE BOUVIER and J. D. CABOS, per dozen, $4 00.

FLORENCE VAUGHAN, the sensation of the year, each, $2.50

J. C. VAUGHAN

NEW YORK: 26 BARCLAY STREET.

CHICAGO: P. O. BOX 688.

HOW TO GROW CUT FLOWERS.

A PRACTICAL TREATISE ON

THE CULTIVATION OF THE ROSE,

And Other Flowering Plants for Cut Flowers, sent to any address upon receipt of $2.00.

M. A. HUNT, Terre Haute, Ind.

VERBENAS.

In Bud and Bloom. Per 100 P. 1000

Mammoth and general collection, choice assortment, all colors, fine bushy plants....$ 3.00 $25.00

ROSES—Fine healthy stock.

Perles, Mermets, The Bride, Sunset, Papa Gontier, Niphetos, Bon silene, La France, Souv. d'un Ami, Duchess of Albany, Mad. Cusin, Mad. de Watteville 5.00 45.00

Hybrid Perpetual Roses in bud and bloom, from 5 inch pots, strong plants . . . 25.00

Tea Roses, in bud and bloom, from 4 and 5 inch pots, strong. .... .. $10.00 and 15.00

Geraniums, double and single, fine assortment of varieties from 2½ inch pots. 4.00 35.00

From 3½ inch pots..... .... 8.00

Heliotrope, strong bushy plants, 3½ in. pots 6.00

Vinca, variegated, strong, 1 year old, bushy 10.00

Lois of other Fine Stock.

Send for new list.

WOOD BROTHERS, Fishkill, N. Y.

FOUNTAIN PLANTS

(*Dracæna indivisa.*)

Fine plants for vases, etc.; 18 inches high, 25 cents each; $2.50 per dozen.

NEW DWARF PLATYCODON "MARIESII."

Hardy as a Phlox; fine for cutting, 75 cents per dozen; $8.00 per 100.

WANT Perle, Sunset, Duchess of Albany, White La France, Mme. Welche, Mme. Lambard, Jack, Paul Neyron, Mary Washington Roses, 2½-inch stock.

Address

HARRY CHAAPEL, Williamsport, Pa.

Cycas Revoluta

The Largest and Best Selected Stock of Cycas Revoluta, fronds and roots cut off, true long leaved variety, now on hand.

For general Japanese and Australian stock, apply to

F. GONZALEZ & CO.,

303-312 Wayne St., SAN FRANCISCO, CAL.

Send for catalogue

Always mention the American Florist when writing to advertisers.

FILL UP HOUSES FOR SUMMER.

Fine young plants, potted now, will be worth many times the money by autumn.

ALL EXTRA STRONG.

PALMS *Per 100*

Latania Borbonica, 2 inch pots . . . . . $ 5.00

Cocos Plumosa, or Weddelliana, 2 inch pots 10.00

Cocos Weddelliana, 3 inch pots 20.00

Areca Baneri, 3 inch pots 10.00

Cocos Plumosa and Weddelliana, strong, from seed boxes 5.00

Latania Borbonica, from seed boxes. . . . 2.00

ORNAMENTAL FOLIAGE.

Dracæna Terminalis, 2 inch pots 6.00

Dracæna, 20 finest sorts, 2 inch pots 10.00

Dracæna Fragrans or Amabilis, 4 in. pots . 15.00

Ornamental Foliage, 25 beautiful varieties, 2 and 3 inch pots 10.00

Crotons, 20 very fine sorts, 3 inch pots. 15.00

Caladiums, 20 very fine sorts, 2 inch pots . . 10.00

Pandanus Utilis, 4 inch pots 25.00

Musa Ensete, 4 inch pots 20.00

FERNS.

Lomaria Gibba, 2 inch pots . . . 6.00

Lomaria Gibba, very fine, 3 inch pots 10.00

Nephrolepis Phillipense; 3 inch pots 8.00

Market sorts, mixed, 10 sorts, 2 inch pots . . 5.00

JOHN H. LEY,

ANACOSTIA, D C.

CHRYSANTHEMUMS.

2½ inch, $4 per 100.

SMILAX—1st class, from 2½ inch pots, $2 50 per 100; $20.00 per 1,000. Samples free.

Add'ess J. G. Burrow,

FISHKILL, N. Y.

ROSES, Leading Forcing Sorts.

PELARGONIUM, Fred Dorner, $10 00 per 100.

ALTERNANTHERA, P. Major and A. Nana.

Coleus, Centaurea, Alyssum, Verbenas, Achyranthus, $2.50 per 100.

JOSEPH HEINL, Jacksonville, Ill.

Surplus Stock.

CLEMATIS, ROSES, Etc.

AT REDUCED RATES, F. O. B. CHICAGO.

	Per doz.	Per 100
CLEMATIS, Assorted, (no Jackmanui), 2 yr.	$3.75	$28.00
CLEMATIS, Assorted, (no Jackmanui), 3 to 4 yr.	4.50	33.00
H. P. ROSES, Assorted, 2 years	1.35	10.00
TREE ROSES, 5 feet, straight stems	7.00	
RHODODENDRONS, Large plants, 18 to 20 buds	11.00	
AZALEA MOLLIS, Fine plants	12.50	
DEUTZIA GRACILIS, Large clumps	.60	4.00
GOOSEBERRY, Industry, 2 year old	1.60	11.00

SWEET PEAS,	Per lb.
Blanche Ferry	.60
Queen of England, white	2 00
Splendor, Cardinal, Boreatton	1.25
All colors, mixed	.40
Eckford's mixture	.70

J. C. VAUGHAN,

NEW YORK: 26 BARCLAY ST. **CHICAGO:** BOX 688.

PRIMROSE SEED

From finest strains in cultivation. Fresh and reliable.

Price per packet	$ .20
6 packets	1.00
14 packets	2.00

Sixty seeds of the single in a packet, and twenty of the double.

Single and double mixed, 12 sorts, 400 seeds,	$1.00
Per thousand seeds, assorted or mixed - -	2.00

Special rates in large lots.

☞Circulars sent on application.

Grown and for sale by

HENRY S. RUPP & SONS, Shiremanstown, Pa.

ROOTED CUTTINGS.

Alternanthera, Versicolor, Tricolor and Aurea Nana	per 100	.50
Alternanthera Paronychioides	"	.75
Coleus, best old and new	"	$1.00

PLANTS.

Fuchsia Trailing Queen	per doz.	.50
Begonia assorted	per 100	$4.00
Mexican Primroses, 3 varieties	"	3.00
Fuchsia, best varieties	"	3.00
" Storm King and Phenomenal	"	4.00
Echeveria Glauca		*3 & 4.00
" Extensa Globosa, for centers, plants nches across	each.	.25

Price List on Application

ROBT. S. BROWN & SONS,

Box 99, Kansas City, Mo.

ROSES,

CARNATIONS AND VIOLETS,

STRONG PLANTS,

WRITE FOR PRICES.

Kemble Floral Co.,

OSKALOOSA, IOWA.

How Are You, Snow Crest?

CUT BLOOMS 50 CENTS PER HUNDRED.

Well, they say we are the best,
For all who see us like us.
And so far we've stood every test
Or otherwise they'd hike us.
We will come your plant to grace
For seventy cents per dozen
Send order now to Gibson's place.
We'll come next day a buzzin'.

50,000 now ready strong rooted cuttings, $2.00 per 100. Full budded and blooming for immediate sales and bedding out. Strong and stocky, $4.00 per 100; $35.00 per 1,000; 500 at 1,000 rates

Florists double white forcing petunias, small plants $3.00 per 100.

Gibson's hybrid pansy, small plants 50c per dozen.

Golden Marguerites, Gem Feverfew, Lobelia, trailing and dwarf, and mixed vase and bedding plants, rooted, $1.00 small plants, $2.00 per 100. Vincas from flats $2.00 per 100. Eulalia, China and Japonica 4 inch size, $3.00. 5 and 6 $5.00 per 100. Satisfaction guaranteed or money refunded.

Address, cash with order please

J. C. GIBSON, Woodbury, N. J.

20,000 VERBENAS.

THE CHOICEST VARIETIES IN CULTIVATION.

Fine pot plants, $2.50 per 100; $20 00 per 1000.

NO RUST OR MILDEW.

Packed light, and satisfaction guaranteed. Send for circular. . . .

Our sales reached nearly 250,000 last year, and we can assure our customers that our plants are fully equal, and assortment of varieties surpass those of last year.

J. L. DILLON, Bloomsburg, Pa.

ROSES AND CARNATIONS.

The Largest and Finest Stock in the Northwest ever offered at the following prices:

ROSES.—American Beauties, from 2½ inch pots, $7.00 per 100; from 3 inch pots, $9.00, and from 4 inch pots, $12.00 per 100.

Meteor, from 2½ inch pots, $5.00 per 100; from 3 inch pots, $8.00, and from 4 inch pots, $10.00 per 100.

Perles, LaFrance, Mermet, Bride and Niphetos, from 2½ inch pots, $4.00 per 100; from 3 inch pots $6.00, and from 4 inch pots, $9.00 per 100. Per 1,000, send for special quotations.

CARNATIONS.—The leading varieties, from 2 inch pots, $3.00 per 100; per 1,000, from flats, $20.00.

BEDDING PLANTS.—Large stock in full bloom.

CUT FLOWERS.—At lowest market prices.

Telegraph Orders Promptly Attended To.

CHRIST. HANSEN, Wholesale Florist, St. Paul, Minn.

MADAM CHAS. WOOD, $5 per 100; $45 per 1,000. 4 inch, $12 per 100.

FORCING ROSES, In the best of health and vigor.

M. A. HUNT, TERRE HAUTE, IND.

COLEUS.

Standard Sorts, $2 25 per 100; $20 per 1000.

My Specialty: **Golden Bedder** and **Verschaffeltie, $2.50 per 100; $22.50 per 1,000;** 2½ inch pots; ready now. Any quantity. Cash with order.

C. F. FAIRFIELD.

SPRINGFIELD, MASS.

Tuberous Begonias.

We still have some fine tubers, which to close out we offer at

Single Mixed, per 100, $4.00; **Double Mixed,** per 100, $7.50; **Single Seedlings,** from seed boxes, per 1,000, $15.00; **Single Seedlings,** transplanted, per 1,000, $25.00; **Double Seedlings,** transplanted, per 100, $5.50.

F. J. MEECH & SON,

Charlevoix, Mich.

Wellesley, Mass.

Jos. Tailby & Son have recently added two more houses to their range, besides a very neat and convenient office building. They report the sales of dwarf calla as far beyond their expectations. There are some very meritorious seedling carnations to be seen here. Besides the two shown at the New York exhibition there is one, a dark deep crimson that is very vigorous, and has all the requisites of a first-class variety.

The greenhouses at Wellesley College are not visited by the craft as often as they should. They are not extensive, and the drain upon the stock for decorations for college events is constant and heavy, but Mr. Butler, the gardener, always manages to have something fine in bloom. He is especially successful with dendrobiums, phalænopsis, ærides, lælias and the like. Among the handsomest plants in the place are two very fine cocoa nut palms, which tower to the ridge pole.

At Mr. H. H. Hunnewell's Mr. Harris is busy getting ready for the out door display. The evergreens are all out, and the rhododendrons are already in position. The azaleas will be under the tent inside of a week. The weather has retarded work greatly and it will all come in a heap, now. The hardy rhododendrons have suffered terribly during the past season. Mr. Harris says it has been the most destructive winter he has seen for thirty years. A new extension is being put on to the conservatory which will take the place in part, of the awning which has been heretofore used. Everything such as azaleas, odontoglossums, dendrobiums, etc. is being held back as much as possible, for the purpose of decorating the conservatory later. The odontoglossums will be exceedingly fine this year judging from their present appearance. Fruit is well set already in the peach houses. In the greenhouses the crotons and dracænas are as usual, magnificent. On the back wall of one house is a big specimen of Wm. A. Richardson rose, covered with bloom.

Over at Mr. Walter Hunnewell's where Mr. Hatfield presides, all attention is being given to out door work. In the houses may be seen, however, the splendid chrysanthemums which are destined to hold their own with all comers next fall if indications fail not.

Elijah Cartwright has had great success with carnations Tidal Wave, Silver Spray and Mrs. Fisher. A singular fact is that Grace Wilder, although within a mile of its original home, is nearly valueless with him. Young stock for next season is already planted out in the field.

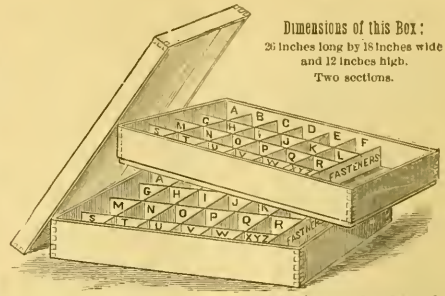
Henry Cartwright is sending some of the best lily of the valley which is coming to the city, from frames. Jacqueminot roses and Silver Spray carnations are his strong hold.

Hartford, Conn.

The Hartford County Horticultural Society will hold an exhibition of roses etc., in June, a general show of fruits, flowers and vegetables in September, and a chrysanthemum show in November. A spring exhibition of flowering bulbs, azaleas, etc. is also planned for next season.

Wilmington, Del.

Mr. M. F. Hayden will soon give up his city store and conduct all his business at his greenhouses on Newport pike, shipping the greater part of his product to the Philadelphia wholesale market.



With an order for 500 letters, we furnish a box made of wood, nicely stained and varnished, such as is represented in the cut.

BOSTON FLORIST LETTER CO.

Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1½-in. and 2-in. 2.00 per 100. Patent tastener with each letter.

OUR NEW SCRIPT LETTER, $4.00 per 100.

N. F. McCARTHY, Treas. & Mangr. | Address 13 Green St., Boston, Mass.

Address all correspondence to 1 Music Hall Place.

We have a new FASTENER which we consider a decided success. Any customers having old style fasteners which they wish to exchange, can do so without additional cost by writing us.

AGENTS:

Marschnetz & Co., 25 N. 4th St., Phila., Pa.
A. Kolker & Sons, New York.
F. E. McAllister, 22 Dey St., New York.
A. D. Perry & Co., 33 Warren St., Syracuse, New York.
E. Kauffman, Philadelphia, Pa.
H. Bayersdorfer & Co., Philadelphia, Pa.
A. C. Rendal, 115 Ontario St., Cleveland, O.
J. A. Simmers, Toronto, Ont. Agent for Canada.
E. H. Hunt, 79 Lake St., Chicago, Ill.
Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.
H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O.
T. W. Wood & Sons, 6th and Marshall Sts. Richmond, Va.
Jas. Vick's Sons, Rochester, N. Y.
C. A. Kuehn, 1122 Pine St., St. Louis, Mo.
D. B. Long, Buffalo, New York.

These Letters are handled by all the Wholesalers in Boston.

Mention American Florist.

THE "LOCKLAND" Sash Bars

ARE ALWAYS SATISFACTORY.

This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.

GUTTER MATERIAL, RIDGES, SASH, ETC.

The finest CLEAR CYPRESS used.

Write for circulars and estimates. . . .

LOCKLAND LUMBER CO.

. . . . . Lockland, O.

STRING

Your Smilax and other trailing plants with

GREEN SILKALINE.

Same cord can be used with plants when decorating. For samples and prices, address

JOHN C. MEYER & CO.,
289 Devonshire Street, BOSTON, MASS.

CATALOGUE PRINTING. ELECTROTYPING.

Done with expert ability for Florists Nurserymen, Seedsmen. Write to

J. Horace McFarland Co.,
HARRISBURG, PA.

THE GREAT ANTIPEST.

For particulars, see next week.

R. W. CARMAN, GEN'L AGT.,
291 Amity Street, FLUSHING, Queens Co., N. Y.

GET THE STATE STRAIGHT!

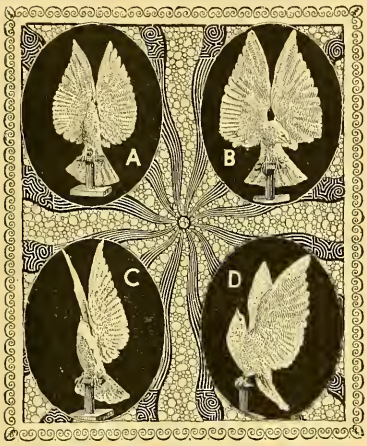
Needed by every Florist, Market Gardener, owner of Lawn, owner of Grass Plot and Flower Bed, in fact, by every one who has a faucet and hose. The Union Hose Connection (patent applied for) for applying manure, fungicides and insecticides to plants. Feed your plants, fertilize your lawns by using liquid manure. A durable device, simple, scientific and practical. No bad odor, no ugly appearance, healthy plants, vivid lawns. Sent by mail prepaid for $2.50. Send for circular. Address Hose Connection Co., Kingston, Rhode Island. Only 32 Kingstons in the U. S. Get the State Straight.

Mention American Florist.

Please mention the AMERICAN FLORIST every time you write to an advertiser.

REMOVAL NOTICE.

Please Note Change of Address: 850 Montgomery Street, Jersey City, N. J.



DOVES

DOVES

DOVES

× × ×

First quality	$14.00 a doz
Second quality	12.00 "
Extra selected	15.00 "

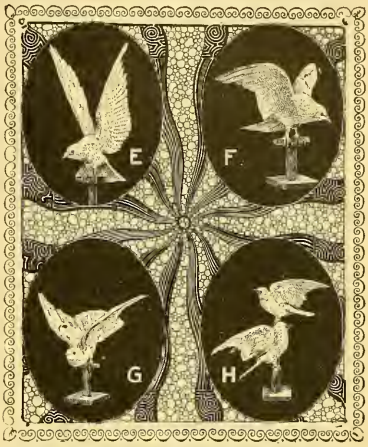
10 per cent. off on orders of two dozen or more.

× × ×

S. J. RUSSELL

850 Montgomery St.

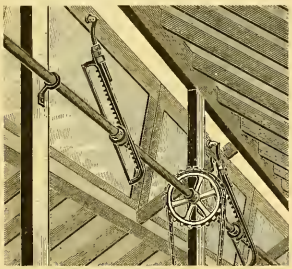
Jersey City, N. J.



FOR SALE BY Messrs. F. E. McAllister, Ed. Jansen, A. Herrmann, N. Steffens and Reed & Keller, New York; W. C. Krick, Brooklyn, N. Y.; H. Bayersdorfer & Co. and Ernst Kaufmann, Philadelphia, Pa.; C. Ribsam & Sons, Trenton, N. J.; J. M. McCullough's Sons and B. P. Critchell & Co., Cincinnati, Ohio; J. C. Vaughan, Chicago, Ill.; Wisconsin Flower Exchange and Currie Bros., Milwaukee, Wis.; C. A. Kuehn, S. Mount & Co., C. Young & Sons Co. and Jordan Floral Co., St. Louis, Mo.; C. Strauss & Co. and Ed. S. Schmid, Washington, D. C.; G. W. Currey & Co. and Eckhardt & Co., Nashville, Tenn.; T. W. Wood & Sons, Richmond, Va.; U. J. Virgin, New Orleans, La.; D. B. Long, Buffalo, N. Y.; J. A. Simmers, Toronto, Ont.

SEE HERE BROTHER FLORIST!

Ain't you tired going through your houses two or three times a day year after year and lifting your ventilating sash one at a time and propping them up with sticks or pots, with a chance of having sash blown off and broken glass to pay for? If you are



We have got just the thing you need, the **Newest and Best** thing out. "The New Departure" for **about half** the cost of the old style. Send for Descriptive Catalogue to

J. D. CARMODY, Evansville, Ind.

STOTT'S DOUBLE SPRAYER

Read Advertisement in Next Week's Issue.

SHEET MOSS,

Fresh and green, for hanging baskets, per barrel, $1.25. Five barrel lots, $1.00 per barrel.
We also still have **Ipomæa Pandurata** at $20.00 per 1000; $2.50 per 100.

JAMES FROST, Greenville, Darke Co., O.

TO TAKE PLACE OF WIND MILLS

HOT AIR PUMPING ENGINES

A Windmill

Is unreliable because it depends upon the elements for its power; hydraulic rams also depend upon favorable conditions and waste as much water as they secure. Steam pumps require skill and hand pumps demand labor and time. The

DE LAMATER-RIDER OR DE LAMATER-ERICSSON Hot-Air Pumping Engines

are especially designed for pumping water, and from shallow streams or any kind of well. They are simple, safe and reliable, require no steam and have no valves. They require very little heat to operate them, and can be arranged for any kind of fuel.

Send for illustrated catalogue to

THE DE LAMATER IRON WORKS,
87 South Fifth Av.,
NEW YORK, N. Y.

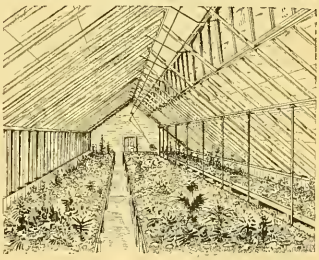
CUTS!

Wood Engraving, Zinc Etching, Half-Tone, Wax Engraving, Photo-Engraving, Designing.

MANZ & CO., ENGRAVERS.
183 Monroe Street, CHICAGO.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

THE CHAMPION



Automatic Ventilator.

The cheapest, easiest to operate, and by far the **best machine** in the market. Don't buy a Ventilator until you have seen my illustrated descriptive circular, which will be sent you free, giving prices, etc. Also **Champion Soil Pulverizer and Sifter.**

Address, **E. E. WOLF,**
Box 114. SPRINGFIELD, O.

STANDARD HOSE MENDER.

The only Mender using ordinary galvanized wire No. 14, instead of expensive bands. Any person can handle it with perfect ease. Thousands in use and all testify to its Wonderful Merits.

Sample Box, by Mail, 50 cts.

E. HIPPARD, Youngstown, Ohio.

U. S. AND FOREIGN **PATENTS** Trade Marks, Designs, Opinions, Searches, &c., promptly attended to. Send sketch or model for free examination as to patentability. All work strictly confidential.

GEO. H. CHANDLEE,
Atlantic Building, WASHINGTON D. C.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

Foreign Notes.

Urceocharis Clibrani is the name of an interesting plant, a cross between Eucharis grandiflora (better known as E. amazonica) and Urceolina pendula. The flowers are white, in shape suggesting both parents, while the leaves are broad and vigorous as the eucharis. It is likely to be as useful as the eucharis, and was originated by an English firm, W. Clibran & Sons, from whom it receives its specific name.

Showy improved varieties of Nemesia strumosa, sent out in England last year, are recommended as extremely showy half-hardy annuals. The flowers range from pure white through all the yellow shades to deep orange, and, from pale pink to crimson. It is very showy in a bed, and said to be useful for cutting.

Begonia decora is a dwarf growing species from Penang, which received a first-class certificate from the Royal Hort. Society. The leaves are from three to four inches in length, the midribs and veins being light green, the upper surface of the young leaves rough and bright brown, changing to a darker shade. The under surface of the foliage is a bright claret color.

Senecio sagittifolius is a new species introduced into Europe from Uruguay; it has dark green leaves attaining a length of nearly three feet, with a frill-like growth along the mid-rib. The flowers are white, with a yellow disc, and are produced in huge heads, the spike often being six feet high. This seems likely to make a showy addition to our subtropical beds.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

Clear Cypress, from bottom gutter up is my specialty.

Lyman Felheim, ERIE, PA.

J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS •

Greenhouse Material,

LOUISVILLE, KY.

Always mention the AMERCAN FLORIST when writing to advertisers.

"Standard" Flower Pots.

As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address

The Whilldin Pottery Company,

BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.

Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.

A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.

We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.

SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY,

Manufacturing the

ELVERSON, SHERWOOD & BARKER

STANDARD FLOWER POTS.

Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bud Pots, etc.

ADDRESS PITTSBURGH CLAY MF'G CO., New Brighton, Pa.

H. M. HOOKER COMPANY,

57 and 59 W. Randolph Street, CHICAGO,

NATURAL GAS MADE GLASS

FOR GREENHOUSES.

Write for latest prices.

ESTABLISHED 1866.

FLORISTS WIRE DESIGNS

MANUFACTURED BY

N. STEFFENS

335 EAST 21ST ST. NEW YORK.

GLASS

which is absolutely perfect for modern greenhouse construction.

ROCK BOTTOM PRICES.

Send for Estimate. Satisfaction Guaranteed

REED GLASS CO.

65 WARREN STREET and 46, 48, & 50 COLLEGE PLACE,

NEW YORK CITY.

Lawn Vases.

THE LARGEST IN THE MARKET FOR THE MONEY.

17x20-inch ....price $1.00.
17x34-inch, with base, price $1.75.
20x22-inch ....price $1.50.
20x22-inch, with base, price $2.25.

Send for our price-list of Standard Flower Pots, Plain and Fancy Vases, etc., etc. Terms cash f. o. b.

HILFINGER BROS. POTTERY, Ft. Edward, N. Y.

FLORAL DESIGNS

The Cut Flower Worker's friend. Fine book of 160 pages. Send $3.50 for it, to

I. HORACE McFARLAND, Harrisburg, Pa.

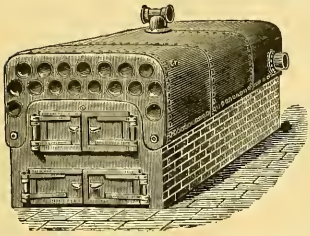
Mention the American Florist when writing to advertisers on this page.

ESTABLISHED 1854.

DEVINE'S BOILER WORKS.

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers

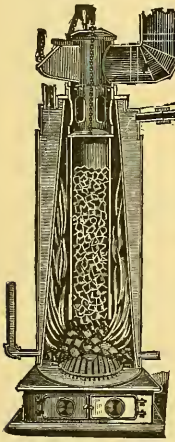


Capacity from 350 to 10,000 feet of four-inch pipe.
SEND FOR NEW LIST.

FRANK DAN BLISH, Att'y,

OFFICE, 189 STATE STREET.
WORKS, 55th & WALLACE STREETS.
CHICAGO.

Mention American Florist.



THE WILKS HEATER,

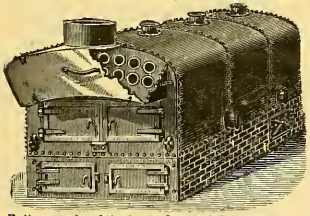
FOR HEATING
GREENHOUSES, STORES, DWELLINGS, ETC.

Manufactured by *THE S. WILKS MF'G CO.* 123 S. Clinton St., CHICAGO, ILL.
SEND FOR CATALOGUE.

KROESCHELL BROS.
IMPROVED

Greenhouse Boiler,

41 to 55 Erie St., CHICAGO.



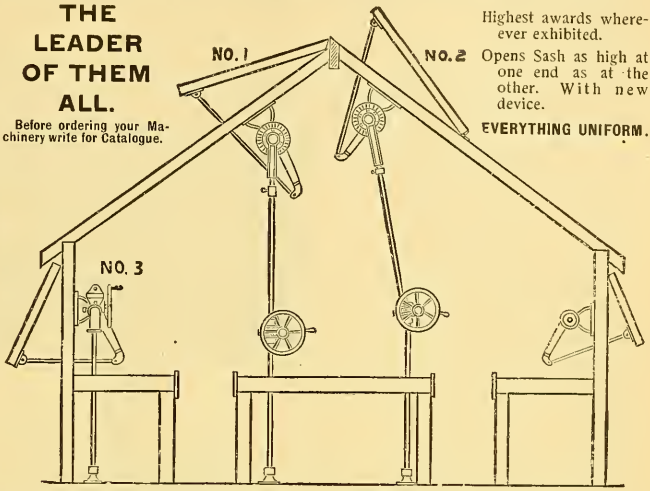
Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around front, sides and back). Write for information.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.
JOHN G. ESLER, Sec'y F. H. A., Saddle River, N. J.

STANDARD VENTILATING MACHINERY,

THE LEADER OF THEM ALL.

Before ordering your Machinery write for Catalogue.



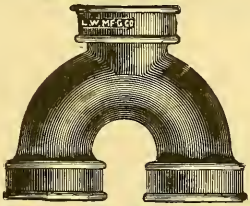
Highest awards wherever exhibited.

Opens Sash as high at one end as at the other. With new device.

EVERYTHING UNIFORM.

E. HIPPARD, YOUNGSTOWN, OHIO.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

L. WOLFF MFG. CO., 93 to 117 W. Lake Street, CHICAGO.

WRITE FOR ILLUSTRATED CIRCULAR.

FRENCH GLASS For CONSERVATORIES, ROSE HOUSES, Etc. Etc.

VANHORNE, GRIFFEN & CO.,

Importers of PLATE and WINDOW GLASS. Manufacturers of BENT GLASS and FRENCH MIRRORS.

131-133-135-137 FRANKLIN STREET, NEW YORK.

Note—Imported Glass is used in the best grade of Greenhouse building.

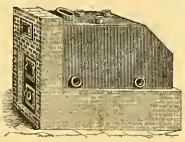
GOODYEAR RUBBER CO.

ALL KINDS RUBBER GOODS.

We make a SPECIALTY in GARDEN HOSE, in both Rubber and Cotton.

A GREAT VARIETY OF HOSE REELS, SPRAY PIPES, SPRINKLERS, ETC.

141 Lake Street, CHICAGO.



GREEN-HOUSE HEATING.
MYERS & CO.
1518 & 1520 S. 9th St., PHILADELPHIA.
Send for catalogue and price list.

YOU CAN SAVE MONEY BY PURCHASING, AND GLASS BY USING *HAMILTON'S PATENT SASH LIFTER.*

"It works like a charm." So say those who use it. Send us 50 cents for one sample and you will say so too.

BAY STATE HARDWARE CO.
272 Freeport Street, BOSTON, MASS

Index to Advertisers.

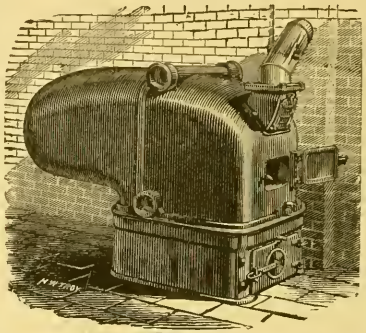
Abel C C & Co.....1087
Adv. Rates, etc.....1084
Anchorage Rose Co....1083
Asmus A & E.....1083
Asmus Ernst 1083
Baller F A.....1090
Barnard W W & Co...1087
Bay State Hdw Co....1095
Bayersdorfer H & Co.1084
Berger H H & Co.....1086
Bunsall Jos E & Son..1088
Bos John Barth 1086
Boston Letter Co.....1092
Brackenridge & Co...1087
Braeuer & Richter....1089
Brown R S & Son.....1091
Burns & Raynor.....1085
Burrow J G.....1090
Burton John.....1083
Carman R W.....1092
Carmody J D.....1092
Chanuel Harry 1090
Chandlee Geo F 1093
Chicago Cut Flower Ex1089
Colclough H 1089
Cook John.....1083
Corbrey T J 1084 1085
Currey G W & Co 1089
De Lamater Iron Wks1093
Devine's Boiler Wks..1095
De Witt Thomas ... 1088
Dillon J L.....1091
Dorner Fred & Son ..1088
Dreer H A.....1088
Elliott W H.....1084
Ellison Wm.....1084
Engle W J.....1089
Fairfield C F.....1091
Faust H G & Co.....1086
Felheim Lymnn.....1084
Felthousen J E.....1088
Field S B.....1090
Forstermann I.....1089
Freeman Lizzie.....1086
Frost James.....1093
Gibson J C.....1091
Gonzalez & Co.....1091
Goodyear Rubber Co.1095
Goodyear Rubber Store 1082
Gurney Heater Co...1096
Hall Ass'n.....1095
Hammond Benj.....1087
Hancock Geo 1088
Hansen Christ 1091
Hart James.....1085
Hart Michael A 1085
Hartford H E.....1089
Heinl Jos.....1090
Henderson John Co...1083
Herendeen Mfg Co....1096
Herr Albert M.....1088
Hews A H & Co 1094
Hillinger Bros.....1094
Hill E G & Co.....1089
Hippard E 1093 1095
Hitchings & Co.....1096
Hooker H M Co.....1094
Horan Edw C. 1085
Hose Connection Co..1092
Houston R J.....1083
Huckins E 1082
Hulsebosch Bros.....1086
Hunt F H.....1085
Hunt M A.....1090 1091
Hunter & Purdy 1085
Kaufmann Ernst & Co1087
Kemble Floral Co ...1091
Kennicott Bros.....1085
Knoop H 1087
Koffman E 1084
Kroeschell Bros 1094
Kuehn C A.....
La Roche & Stahl.....
Lewis E B .....
Ley John H .....
Lockland Lumber Co...
Lombard R T 1088
Long Dan'l B.....1085
Lonsdale Edwin.....1089
McCarthy N F & Co. 1083 1085
McCrea & Cole 1088
M'Farland J H.....1094
M'Farland J H Co....1092
M'Gowan John.....1088
M nz J & Co.....1093
M rschuetz & Co.....1084
M ry John N 1088
M ech F J & Son 1091
M yer John C & Co. 1092
M chel Plant & Bulb Co 1087
Millang Bros.....1085
Moffatt G J.....1087
Moninger Jno C 1096
Moon Samuel C.....1089
Monre Frank L.....1083
Mullen Geo 1085
Myers & Co 1095
Nanz & Neuner.....1083
National Plant Co....1083
Nielson Hans 1085
Niles Centre Floral Co1085
Olson M 1085
Ouwerkerk P.....1089
Peck & Sutherland....1085
Pennock C L.....1088
Pennock Sam'l S 1084
Pierson F R Co. ... 1086
Pillsbury I L 1087
Pittsburg Clay Mfg Co1094
Prince A G & Co.....1085
Powell I L.....1088
Quaker City Mach Co.1096
Randall A L 1085
Reck John 1089
Reed Glass Co.....1094
Reimschneider Ernst.1087
Reiss & Brady.....1084
Renard Joseph.....1088
Rimbaud Benj.....1086
Roberts D H.....1087
Roehrs Theo.....1085
Rogers Nurseries.....1089
Rolker A & Sons.....1089
Rupp H S & Son.....1091
Russell S J.....1093
Sander & Co.....1087
Schulz Jacob.....1093
Segers Bros.....1087
Segers & Co 1086
Shelmire W R.....1088
Sheridan W F.....1085
Siebrecht & Wadley...1087
Simons R E.....1082
Sipple Doppfel & Co...1094
Situations, wants....1082
Smith C A Floral Co..1083
Smith & Webster.....1096
Steffens N.....1094
Stout Garden Imp Co..1093
Struck J N & Bro.....1094
Styer J J 1088
Sunderbruch H L.....1085
Tilton Bros 1089
Tipton & Hurst.....1082
Tricker Wm.....1090
Ulbricht F J.....1089
Ure John C.....1090
Vander Schoot R & Son.....1086
Van Horne Griffen & Co 1095
Van Tubergen C G Jr.1087
Van Waveren & Kruyff.....1086
Vaughan J C.....1090 1091
Weeber & Don.....1086
Welch Bros.....1085
Westgate N E & Son..1084
Whilldin Pat Co 1094
W P.....1096
Co.....1095
Wood Bros.....1085
Wood Bros.

GoodellHH
Mass Agri Col
1503

WHEN writing our advertisers please use one of your printed business letter heads or enclose your business card.

GREENHOUSE HEATING & VENTILATING

Horticultural Architecture and Building.



HITCHINGS & CO.

Established 1844.

233 Mercer St., New York.

FIVE PATTERNS OF BOILERS.

NINTEEN SIZES.

Perfect Sash Raising Apparatus.

Rosehouses, Greenhouses, Etc, of Iron Frame Construction, Erected complete, or the Structural Iron Work shipped ready for erection.

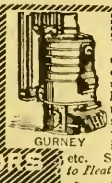
Iron Frame Benches with the "Perfect Drainage Bench Tile" or Slate Top.

SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUE.

Gurney

HOT WATER HEATERS AND RADIATORS

FOR HEATING DWELLINGS, PUBLIC BUILDINGS, ETC. BY HOT WATER CIRCULATION.

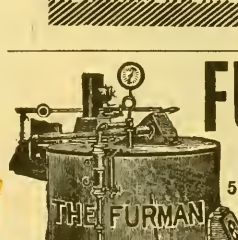


GURNEY

These HEATERS embody every modern feature of excellence. The Gurney is unequalled for heating dwellings and buildings of ordinary size. The Gurney Crown stands without a peer for larger work, such as public buildings, churches, greenhouses, etc. Send for *How Best to Heat our Homes.*

Gurney Hot Water Heater Co.
163 Franklin St. Boston.
N. Y. City, Johnson & Co., 71 John St.
Phila., J. C. F. Trachsel, 246 Arch St.
Chicago Rice & Whitacre, 6 S. Canal St.

GURNEY CROWN



FURMAN BOILERS

Economical — Substantial — Safe.

56 STYLES AND SIZES—BURNS HARD OR SOFT COAL.

Modern Hot-Water Heating

These Boilers have a high reputation for Staunchness, Durability and Safety, and are **GREAT COAL SAVERS.** Minimum Friction and Maximum Velocity only obtained by **VERTICAL WATER CIRCULATION.** Send for new 150-page book giving full particulars and a great deal of valuable information on modern Heating and Ventilation, with plans and tables for correct hot-water work. Mailed free.

Address **HERENDEEN MFG. CO., 26 Vine Street, GENEVA, N. Y.**

SMITH & WEBSTER,

MAKERS OF

GREENHOUSE PIPE

FOR HOT WATER AND STEAM,

193 Lake Street, - CHICAGO, ILL.

CYPRESS GREEN HOUSE MATERIAL

CLEAR CYPRESS SASH BARS

HOT BED AND VENTILATING SASH

JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

THE PERFECT DRAINAGE

BENCH TILE

For circulars, etc., address

W. P. Wight, Upland Green Houses,

Send your business card. MADISON, N. J.

EVANS' IMPROVED

CHALLENGE VENTILATING APPARATUS

Write for Illustrated Catalogue.

QUAKER CITY MACHINE WORKS, Richmond, Ind.

THE AMERICAN FLORIST

A WEEKLY JOURNAL FOR THE TRADE

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. CHICAGO, NEW YORK, MAY 25, 1893. **No. 260**

Boston Mass. Agr'l Coll. Library

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company. Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,

322 Dearborn Street, CHICAGO.
Eastern Office: 67 Bromfield St., Boston.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis, Mo., August 9 to 12, 1893.

CONTENTS.

The World's Fair 1097
Requisites for a successful flower show 1097
Views at the New York show (illus) . . . 1098
Introduction to study of plant life 1098
Opening of the World's Fair (illus) 1101
Carnations—Seasonable hints. 1102
Miscellaneous seasonable hints 1102
Ferris wheel at the World's Fair (illus) 1103
Boston 1103
Philadelphia 1103
New York 1104
Chicago 1104
Baltimore 1104
Washington 1104
A fruitless industry 1106
Decision regarding duty on plants 1108
The seed trade 1110
Pittsburg 1110
Toronto 1112
Buffalo 1114
St. Louis 1116
Indianapolis 1118

BURLINGTON, IOWA.—Jerome Bock mourns the loss of his wife, who died the first week in May.

ALTOONA, PA.—One of the greenhouses belonging to the Penna. R. R. was destroyed by fire on the morning of April 27.

DENVER, COL.—The first "Smoker" of the Denver Florists' Society was held May 20. As per the notice the "Trouble commenced promptly at 8 o'clock."

JACKSON, MICH.—Robert Heath, of Cincinnati is about to erect a greenhouse establishment here, where he will grow flowers for the Chicago market.

GERMANTOWN, PA.—The display of wild flowers shown at the May meeting of the Horticultural Society was uncommonly full. Mr. Joseph Meehan's group included 130 varieties.

CHARLESTON, S. C.—The annual floral fair of the Agricultural Society of South Carolina was a magnificent event. The decorations of the hall were exquisite and the display of plants, floral designs and cut flowers was very large, far exceeding anything of the kind done in former years.

The World's Fair.

Now that the exhibits in the Horticultural display are all in place and the little rough spots have been smoothed over its magnitude and beauty cannot fail to excite great admiration. The half of the Horticultural Building that is devoted to floriculture is a bewildering maze of flowers and foliage. The favorable weather during the last two weeks has done wonders for the plants, and specimens that seemed slow, have suddenly put on their best exhibition dress and are ready to receive the visitors of the world. The Australian tree ferns seem to lengthen their fronds while you look at them. These ferns have been arranged in a beautiful, naturally disposed group near the entrance to the north curtain, the earth banked up around the boxes in which they are planted, and the earth covered with quick growing vines. It is a charming exposition of the "Art that doth mend nature."

It was an inspiration on the part of the architect of the building to arrange a view from the balcony of the dome into both curtains. From the balcony a fine view is had of each curtain and from this position the scene is a charming one.

Truly, floriculture has taken the position it was entitled to at the great Fair, and that this magnificent display will result in incalculable benefit to the trade none can doubt.

The plants that comprise the display of the French government will be arranged in a group out of doors. The collection includes some very handsome specimen palms and like decorative plants and the display when arranged is bound to be a very attractive one.

The calceolarias have been passed upon, Mr. F. Kanst, superintendent of South Park, acting as judge. But the awards have not yet been made public. The American exhibitors were Messrs. John Gardiner & Co., H. A. Dreer, R. & J. Farquhar, Peter Henderson & Co., and J. M. Thorburn & Co. The English exhibitors were John Laing & Sons, H. Cannell & Sons, James Carter, Kelway & Son and John Forbes. Germany was represented by Fred Roemer, E. Benary, Haage & Schmidt, Henry Mette and Deppe Bros. France was represented by but one exhibitor, Vilmorin, Andrieux & Co., but the exhibit of this firm made up in quality what was lacking in quantity and it will in all probability receive first prize.

The big rhododendrons from Moser, the French nurserymen, are now in bloom and are a magnificent sight.

The Island now begins to make a showing, though the foliage of the trees and shrubs is not yet fully unfolded. Some of the magnolias are beginning to bloom, but as yet nothing else is in flower.

The Japanese village at the north end of the island is now being put into shape and quite a number of additional trees and shrubs are being planted. The miniature Japanese garden in the Horticultural Building is being remodelled, Mr. Izawa having received a fresh consignment of plants, with which he is replacing those in the garden that have missed or were not giving the best results.

The extensive display of Messrs. Ellwanger & Barry, on the Island, came through the winter in good shape and will prove very interesting. The displays of the Dingee & Conard Co., and of Rea Bros, are also looking well.

The rose garden shows occasional misses, but on the whole looks well considering the very hard winter.

A German firm has recently planted a bed of "tree roses" on the Island, but all that is seen now is the forest of thick stakes that always accompany such "trees."

The landscape department has planted big beds of rhododendrons in front of several of the buildings, and have also placed pots containing palms and dracænas on the posts of the massive railing that lines the lagoon in front of the Manufactures, Machinery and some other buildings. The general effect of the latter is good and will be perfect when the pots are painted white, the red of the pots being rather too obtrusive against the white buildings.

What are the First Five Requisites for a Successful Flower Show?

Every time that a flower show takes place its success or failure is ultimately measured by the attendance of the public on the same. In other words if the show pays expenses or better, then everything is lovely and the exhibition was "a great success." But if on the other hand the receipts are far below the cost of production then all hands feel "blue" and the feeling runs high that flower shows cost more than they are worth, and are altogether unsatisfying and unsatisfactory in every respect. Exhibitors, committeemen, all hands in fact, vow they are through with them henceforth and forever. And there are few who will not sympathize with them in this resolve, for the time, trouble and worry incident to the getting up of a show is enormous and can be appreciated only by those who have been through the mill. When all is done that can be done to make a grand show, when all hands have toiled and sweated all the day and half the night for days and nights in succession, and after all to have but a beggarly half-dozen in attendance instead of the crush that was expected as soon as the doors were opened is indeed exasperating.

It would be interesting to know how many of the many flower shows held

within the last ten years have been paying successes. That they have been rather limited is evidenced by the comment that is caused when a really truly financial success is achieved. An "old hand" has hazarded an opinion to the writer that three-fourths of them do not pay. That looks like a reasonable estimate too and if correct it goes to show that we are but amateurs yet in the art of show giving.

We certainly have a good deal to learn and now that the slack season is on again we might as well be thinkiog the matter over.

The two first requisites of a successful flower show are generally admitted to be, first, a good exhibition, and second, good weather. Given these two the rest is comparatively easy. Without them nothing may avail. But there are other details that are necessary. A good show held in good weather and with everything in its favor has been known to be a financial failure. A notable instance was the New York spring show of I think the year 1890. It was a first-class show in every way, the weather was good and yet somehow or other the attendance was very slim. Other instances will readily occur to most of us.

Now what is the reason for this lack of attendance by the public? We cannot lay it to lack of interest, for the big crowds that turn up at the occasional successes show that it is possible to get the public by the ears if we go the right way about it. To my mind the cause of some of the failures has been *too little talk* about the show outside of professional circles. We are too apt to imagine that because we know all about a thing, that everybody else must surely have heard of it also. There are other details, such for instance as a lack of novelty, or poor arrangement of exhibits, etc., that would have an effect on the result, even granting the two prime requisites of good show and good weather, but these details are as a rule attended to with a due appreciation of their importance and are not nearly so often neglected as the matter of "talking up" the show among the outside public.

We might take a leaf from the books of our theatrical friends in this matter. They make failures of course, but not usually because they fail to "toot their horn." These theatrical men know the importance of publicity and they spend liberally to get it. It would surprise some of our flower growers if they knew the sums these amusement caterers spend in advertising. But money alone will not do the business. It must be used intelligently. If there are none in the ranks of the club or society thoroughly conversant with the proper methods of securing publicity, there are experts that can be hired for the purpose, and it might be the most economical method in the long run. But if there are the right sort of people in the ranks they are preferable because they can do most effective work as a literary bureau for supplying entertaining literature of a nature to arouse interest in the exhibits.

This same matter of "talking up" is well understood by the newspaper people and it is interesting to watch the methods of a successful journal in booming its circulation. The New York *World* and the New York *Recorder* are good examples of this in recent years.

The public are attracted to a flower show a good deal from the same general reasons that compels them to buy a lively journal, *i. e.* curiosity, imitation, desire for amusement, etc., and (the elder) James Gordon Bennett's receipt for the making of a successful newspaper is instructive. It was "First, get all the news. Second, then make a damn fuss about it." My idea of the five requisites for a successful flower show are therefore as follows in the order of their merit:

1. Good show.
2. Good weather.
3. Novelty.
4. Publicity.
5. Harmony.

That is the way I look at it now, but I am not hide-bound about it and am willing to "shuffle" the cards, add or discard, with fresh light on the subject. If the editor is to offer a prize for the best receipt of course I would have to let "tabled cards lie." I hope he will offer a prize, for there is much diversity of opinion on the subject, and the prize receipt ought to be worth its weight in gold to the managers of the fall shows.

G. C. WATSON.

Philadelphia, May 19, '93.

AT THE NEW YORK SHOW.

Views at the New York Show.

Our photographs taken at the Madison Square Garden were not as successful as we would wish, the weather being most unfavorable for such work at the time, but we present herewith reproductions of a few of the best of them.

In the upper left hand corner of the group is seen the bed of spring flowering bulbs from W. H. Siebrecht, while a similar bed from Pitcher & Manda appears in the lower left hand corner.

In the upper right hand space is seen Mr. Warendorf's mantel decoration, which took first premium. The crescent which crosses the mirror was made of Mme. Gabriel Luizet roses and the border of small adiantum plants inserted in a frame work prepared for the purpose.

In the center is the group of roses exhibited by J. N. May, which received a special award for excellence, and in the lower right hand corner is seen Mr. Asmus' vase of Mme. Caroline Testout roses, which was awarded the special $50 premium offered by Mr. J. H. Taylor for the best pink rose.

In the small picture shown separate from the group appears the exhibit of roses made by Mr. Ernst Asmus.

An Elementary Introduction to the Study of Plant Life.

BY FRANCIS CANNING.

[*Read before the May meeting of the Penna. Hort. Society.*]

In commencing to treat of the study of plants it is necessary to observe that the word plant includes every member of the vegetable kingdom, from the smallest moss to the largest tree; from the buttercups and grasses of the fields to the oaks and pine trees of the woods, every form of vegetable growth is a plant of some sort or other. Plants are living things, but like animals they depend for their existence on certain physical conditions, namely, on the presence of light, heat, air and water; like animals they pass through certain invariable stages of being, namely, youth, maturity and decay.

It will perhaps be best to commence our study with the germinating seed, and from the seed we will follow it up and see what it will eventually become—a plant similar to that upon which it grew will naturally be the result, as the function of the seed is to perpetuate the species, and then we will consider of what material the plant is built that has been produced by this seed and consider how it grows and increases.

These reproductive bodies (seed) can only be called into existence (or life) under certain conditions. These are a certain amount of heat, moisture and air, and exclusion from light accelerates the process. Now, if seeds (like this) be placed under these conditions it will commence to grow or germinate, hence the wood germination. Before we advance any further it will be best to understand the structure of the seed and by what means the young plant can exist, being such an infant and unable to procure food for itself. You will find on removing the skin of a bean seed for example that the inner portion is divided into two nearly separated halves of equal size, the point of attachment being on the outer edge, by a small body which resembles a hinge, but which actually is a rudimentary plant. The two fleshy bodies are what are called seed-leaves or cotyledons, and are designed to contain nourishment for the little plant before it is sufficiently developed to support itself. Now, when the seed was placed under the requisites of germination what took place? The

VIEWS AT THE NEW YORK SHOW.

moisture was absorbed, which resulted in the bursting of the seed coat, the rudimentary plant commenced to grow by sending a small root into the earth, and afterwards a rudimentary stem upwards, and at the same time rendering the contents of the seed-leaves suitable for the use of the young plant, so that by the time the supply is exhausted the little plant is able to care for itself and elaborate its own food, a process which we will afterwards consider. Of course all seeds are not constructed like the bean, for some have only one seed leaf or cotyledon, and in others they are sometimes absent; in fact the constructions of the seed are various, but I think if we can clearly understand the process of germination with seeds having two cotyledons, called dicotyledons and representing a great division of flowering plants, it won't be so difficult to understand the other processes, having a clear idea then of how the little plant is called into life. We will try and find out how it obtains its nourishment for future growth and in what way it obtains it. But before doing so we will consider the question of seed sowing, as most of us may be sowing seeds for ourselves shortly.

I have known disappointment to be the result after sowing packets of seeds and expecting to get a good display from the same. Now this may have been the result of imperfect seed, or sown too deep or too shallow. As regards seed sowing it is very important that they should not be sown too deep or too shallow. It is stated air is necessary for germination, therefore if sown too deep that important element is not admitted, but of course differences as to the nature of the soil is a consideration, but generally speaking the range should be one-half an inch to two inches in depth, but it has been experimentally proved that seeds germinate more in proportion and quicker if sown at one-half inch depth. In very small flower seeds about twice their own depth is sufficient, and one point always to be remembered is that after germination has commenced they must not be allowed to get dry; moisture is absolutely necessary at this stage. It is very important that

seeds should be thoroughly ripened before taking them from the plant and storing them away. I believe half the failures in seed sowing are due to the fact that they have been plucked before arriving at maturity. Then, again, they should be kept in a dry uniform temperature and everything promotive of decay and germination to be avoided; in fact keep them as dry as possible should be the watchword to those who wish to preserve seeds. Some seeds have a wonderful power of retaining their vitality, while others require to be sown as soon as ripe. It has been proved that some have germinated one hundred years after their production. Melon seeds have germinated after a period of forty years, and even the bean seed here will germinate after ten or twelve years, although the plant then produced is of little account.

Now, could not practical use be made of this slight knowledge as regards the collecting, preserving and sowing of seeds from a horticultural point of view? This is a very important branch.

THE PROCESS OF PLANT NUTRITION.

We are now in a position to consider in what way plants obtain their food. If we stop to consider carefully the process of growth in plant life, we notice that in this little seedling its whole aim and object is to increase in size by forming new leaves and buds, in fact it seems to have for its object the building up of its own individual self. This building up, as we see, is being performed only by certain organs, and these are what are known as the nutritive or vegetative organs. After a plant has arrived at a certain period of its existence, it produces flowers and seeds in order to reproduce itself, and to such an extent do some plants draw upon their own resources in order to bring about this reproduction that in many cases their very existence is threatened, and sometimes ends in death. Those organs that are associated with the reproduction of the individual upon which they grow are called organs of reproduction.

We will now consider the vegetative organs or nutritive system in plant life. The organs which are essential to vegetation are the root, stem and leaves.

The root: We have already learned how the root originates. We saw from the seedling that it assumed a downward tendency, avoiding the light. It is the organ by which many plants fix themselves to the earth or substances upon which they grow. It is also the organ by means of which plants derive their nourishment from the earth, or, as in the epiphytes (or air plants) from the atmosphere, or as in floating aquatics, from the water. The food so obtained is not absorbed directly by the roots but by root hairs, which exist in large quantities on the younger parts of roots and fibrils. Their structure is very minute, but under strong magnifying powers will be found to consist of one or two cells of hair-like appearance, with a hollow tube through which the fluids pass. In taking up plants or trees it would be impossible to perform the operation without breaking off or injuring many of them. The growing point of roots, as one might suppose, is not by any means the part that absorbs food, nor do they come in immediate contact with the soil, but are protected by a sort of sheath or cap of cellular tissue, and as it becomes worn by working its way through the soil and other hard substances it is constantly renewed from within by the growing point. It is indeed wonderful what roots will penetrate, I have found roots that have passed clear through a solid piece of cinder and solid bulbs that have been in their way. They disintegrate soil and rocks on our mountain and hill sides, and much of the fertility of the surroundings are due to their work, by breaking apart solid rocks, and, with the influence of the climate, render it into soil of the highest fertility.

But while they do so much good they have also very destructive properties. The following incident will prove how even man's calculations have been destroyed by the inquisitive strength of a root. A gentleman bereft of his wife placed a tribute to her memory in the shape of an elegant solid monument on her grave, which he boasted would stand the storm of time for everlasting, and then left the place for abroad. It might have endured for endless ages had it not been that a birch tree seed was blown at the base of this splendid memorial. The seed germinated, roots were gradually formed, and by a slow and untiring process worked their way into some of the joints, and as no one interrupted its destructive course, the monument was lifted bodily in a leaning position ready to fall at any moment and proved after all a very temporal affair.

In large trees the roots descend to a great depth and send their gigantic branches in all directions, and, as large trees require a great amount of nourishment, this extension is necessary. In certain trees, as firs and pines, they descend but a short distance and then commence spreading horizontally in all directions. Now this brings us to an interesting rule which is not generally noticed; you will find that the roots of trees that grow to a great altitude and are not particularly bushy in appearance descend far down into the earth, whereas those trees that have considerably bushy tops and do not grow to any great height have superficial roots spread over a large area, so that in whatever direction a storm may come they have roots to hold against it.

Roots in a state of nature when searching for food, do not seem to have the power to resist any injurious substances with which they may come in contact, and no doubt this is answerable for the death of a great many plants and trees, but it seems to me also that roots are somewhat attracted in the direction where food to their particular liking is abundant. I have known several instances of this kind, but the following incident will I think be sufficient proof:

A gentleman wishing to grow grape vines was recommended to use granite dust in the soil in which they were to be planted. It has long been demonstrated that granite dust is a favorite and beneficial food of that plant. Having considerable left over he covered it in at one end of the border in which they were planted. Having occasion several years afterwards for the use of this surplus granite dust, it was discovered to be completely filled with active roots from the nearest vine, which bore evidence from its luxuriance that granite is a favorite food of that plant, and from the fact that the roots had taken an upward direction in order to reach the granite dust, proves that they may have some slight power in selecting their food.

The various forms of roots: We saw in the germinating seed of the dicotyledonous plant, that the elementary root commenced to elongate and form one principal axis termed a tap root, this is characteristic of dicotyledons. But it sometimes happens that they commence dividing from their commencement without any apparent leader, as seen in many shrubs, groundsel, and many plants of annual duration. They are then described as fibrous. Sometimes these equal divisions become fleshy and thick, as seen in the garden dahlia, then described as tuberous; such roots store up food for the next season's growth. In many plants of biennial and perennial duration the taproot assumes various shapes, plainly seen in such roots as carrots, parsnips, etc. then described as fusiform; if like the turnip conical. The object of these roots in biennial plants is to serve as a storehouse of nourishment for future growth. The plant does not flower the first year, but elaborates food, which stored away in the root for future growth, plainly seen. When one flowers the root decreases in diameter to the expanse of the stem. Flowers, fruits, and stem die as winter approaches.

There are also roots which serve to support the plant on any object upon which it may grow, although not capable of absorbing any nourishment from the object; such roots are "adventitious," illustrated by the ivy and Ficus repens, which can often be seen growing quite fast to glass partitions in greenhouses.

Some plants not only grow upon another, but derive nourishment from them by sending their roots into the substance of the plant upon which they grow; in fact entirely depending upon them for their existence; such plants are "parasites," the mistletoe, dodder, and the grand rafflesia, which is the largest of known flowers, forming conspicuous examples. Such plants invariably turn black in the process of drying, instances of which I have particularly noticed in the beech drops, and the American foxglove (gerardia). Fungi and certain other colorless plants obtain their nourishment from decomposed organic matter, and are called Saprophytes.

Roots of certain plants have the power of forming buds and producing leaves and branches; advantage is taken of this for purposes of propagation. Dracænas, bouvardia, Anemone Japonica and certain other plants are generally and more advantageously propagated in this manner.

The stem we noticed originated from a bud in the seed. It assumed an upward direction, seeking the light and air, is colored green, bears leaves and is the organ by which the nutrient matter absorbed by the root is conveyed to the elaborating laboratories, the leaves. It assumes quite a number of forms, and may grow upright or creep along the ground (procumbent) or cling to other objects for support (climbing) or twist themselves around other objects (twining) and in any case it may die down annually, then described as herbaceous, or become woody. It gives off at intervals leaves and buds. These buds are usually developed in the axils of the leaves and are rudimentary branches, their branching is often very symmetrically arranged, and are objects of admiration when in full leaf and vigor. The stem, like all other parts of plants is subject to a great many modifications.

There are various kinds of stems of herbaceous or woody texture, and here again may be found instances where reserve material is stored away by certain plants. The short thickened underground tuber of the potato and artichoke and the fleshy short leaves of the onion, the underground stem of Solomon's seal and anemone, often mistaken for roots, creeping near the surface of the soil, but readily distinguished by the presence of leaves or buds, are all examples of such stems.

Stems are often used for purposes of

OPENING OF THE WORLD'S FAIR. [SEE NEXT PAGE.]

propagation by taking cuttings of certain parts and placing them under similar conditions required to produce germination. They will form roots readily, and a great many plants are propagated in this way. It is well to remember in making cuttings from a new growth to preserve as many leaves as possible, as root formation then depends upon their presence. Layering is another process by which certain plants can be best propagated, that is by bending the stem or branch, and with a clear cut nearly separate it, and at that point fix it firmly in the soil; with assistance from its parent it will form roots more readily. The tubers of the potato can be divided up into as many portions as there are eyes or buds, and each will grow into a separate plant. The stems of cacti are peculiar, and worthy of notice from their special form and growth, and on account of their performing the functions of leaves.

There is a wild plant which of late years has adopted unusual circumstances, and is an instance of where the vegetative organs become the reproductive. This plant is Brunella vulgaris, or self-heal. Apart from its usual haunts, road sides and fields, it has established itself in well kept lawns, where even the action of the lawn mower has failed to eradicate it; in fact it has so adapted itself to its new way of living as to succeed admirably. As it is unable to flower it reproduces itself by off shoots and roots from nearly every joint, and if left undisturbed will soon form undesirable looking patches. This plant has only been noticed quite recently growing under these new conditions, and I strongly recommend its speedy eradication whenever seen, as a whole lawn would soon be ruined by its invasion.

Leaves: Now we have come to the last of the vegetative organs, the leaves, but not by any means the least important, as we shall find. Leaves are usually spoken of as appendages of the stem and branches. They assume an innumerable variety of forms, for which technical terms are applied; indeed it would take a long time to give a full description of the various modifications of leaves, but these come under the head of descriptive botany, and as we are considering more at present how plants grow and obtain their food, we will look upon the leaf as a whole and consider the important part it takes in the process of plant nutrition. We have learned that the root absorbs water and that it is conveyed to the leaves through the stem; now what goes on in the leaves after the water has reached them? It is elaborated, or goes through the process of cooking, as it were, and made fit for use for the building up of the plant. This process of elaboration, or assimilation, as it is properly called, is carried on during the hours of daylight and sunshine.

But before we can understand this process properly we must consider the construction of an ordinary foliage leaf. The large flattened portion called the blade of the leaf is the part where assimilation takes place, although other green parts carry it on to a limited degree. A leaf, like all other parts of the plant, is built up of cells small and roundish in appearance, and what we call the veins are similar cells, only longer and thicker, and sev-

eral joined together, and serve as a frame work for the solter portions; they are called fibro-vascular bundles. The leaf surfaces are covered with little mouths or openings between the cells that are extremely minute, thousands of them being in a square inch of leaf. These openings or pores are called stomates and are most abundant in the lower surface, the upper surface of them being of a more leathery texture and possessing fewer stomates.

We shall see when speaking of the chemistry of plant life that there exists in the air a certain gas called carbonic acid gas, which is composed of oxygen and carbon. Now this combination of these two gases is injurious and deadly to the life of men and animals. Leaves inhale this gas through their stomates, and during the process of assimilation separate the mixture by retaining the carbon, which is combined with the watery fluids absorbed by the root for its own building up and give off the oxygen, which is a life sustaining gas when not in combination with carbon. Thus we see plants purify the air by converting poisonous gases into pure and wholesome air. This process of assimilation also involves transpiration, when the oversupply of water is exhaled from the leaves in the form of vapors. This exhalation tends to keep plants cool, but often in the dry atmosphere of parlors absorption cannot keep pace with this exhalation, consequently their faded appearance when the rooms are kept very close. The question might be asked, does the presence of plants in parlors or bedrooms have a wholesome effect? I should say most decidedly, yes, as they have a tendency to bring about a more uniform temperature by giving off these moist cooling vapors and the process of respiration, as we have just noticed, are obvious reasons for drawing those conclusions, although it must also be remembered that the process of respiration is reversed during the hours of darkness, but the amount then carried on could not make any material difference to the healthiness of a room.

It is wonderful how leaves are arranged so as to expose the parts to sunlight. You will notice when looking down on the top of a plant how every possible available space is taken up, and it is often difficult to find one leaf overlapping another. An instance of this kind can be plainly seen from Lansdowne Bridge looking down on those beech-trees growing near the bridge; when in full leaf it will be impossible to see the ground through them, having filled up every inch of space in exposing themselves.

Trees are very necessary for a water supply; by their presence on hill sides and mountains, or wherever they grow, they retain the rainfall, which is absorbed in the ground and held to the amount of one-fifth, whereas in open ground one-fifth of the water supply runs out of the country. So that in woody mountain districts so much is always available for watering the surrounding country at dry periods, so that here is based a protest against denuding our hill sides and waste ground of trees for lumber purposes, and the advisability of planting in such places trees that will render such valuable assistance to the fertility of the country.

[CONCLUDED NEXT WEEK.]

Opening of the World's Fair.

The accompanying illustration is from a photograph taken at the moment when President Cleveland touched the button which set the machinery in motion and gave the signal for the raising of the flags. The Spanish colors are seen in the background as they shot into the air. The president, surrounded by his cabinet and World's Fair officials, stands immediately behind the little table which is seen to the right of the center flagstaff. The crowd back of the president is composed of invited guests and are ranged on a gently rising platform which reaches to the Administration building. The building in the background stretching to the left is Machinery Hall. Some conception as to the size of the buildings can be obtained by noticing the workmen grouped on parts of the statues.

Seasonable Hints.

We have by no means reached perfection in the management of our carnation plants. But we should all constantly strive for that desirable consummation. There appears to be a particularly weak point in our procedure in the lifting of the plants from the open ground in the fall. True, by using due care we manage to get them transferred to our benches with but little loss, and in a short time they recover and bloom abundantly. But there is still no denying the fact this operation is a pretty severe one to the plant, and from which it takes time and care to recover. The working roots are severed from the plants and these must be renewed before the plant can go forward. Even when lifted with balls but few of the working roots are secured, for they will be found several inches below the surface. As long as we plant our carnations in the field they will be subject to this serious drawback. The question is how shall the matter be remedied? We have heretofore tried to be very practical, perhaps severely so, and we hesitate to enter the theoretical field. Our only plea is that some one among us may be induced to make the necessary experiments in this direction. Some attempts have already been made to solve the problem by planting the young plants directly on the benches in the spring. We have never heard with what success. It seems to us this plan has many objections, not the least of which is that the houses are not ready for their reception until the middle or latter part of summer. In the meantime something must be done with the young stock. Then supposing a house planted in the spring, would they grow as well as if exposed to the full sunshine and air? There may, however, be room here for experiment. It has been suggested to have houses with movable glass; but with our little experience in this line we find that the soil in the benches is apt to become sodden and useless from excessive moisture of a wet season, and it would be necessary to renew the same for a winter crop. Houses exposed to the weather too without the glass are subjected to much more wear, and decay sooner than where the glass covering remains intact. We should like to have the views of others on this subject, and will present an untried plan of our own in our next paper. W. R. SHELMIRE.

Avondale, Pa.

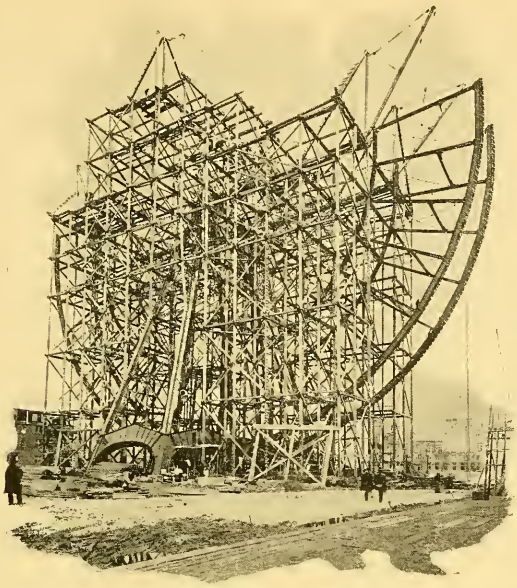
Miscellaneous Seasonable Hints.

When you are busy selling your spring stuff, don't forget to plant out sufficient stock for your own self, and take time to do it however busy you are. It is not fair to wait till the end of June and then plant out the rubbish and expect to get a good and sufficient supply of cuttings in the fall for your following year's business. Not only do you get the poorest, and perhaps diseased, plants, but it is too late to get a good supply of cuttings by September. Take warning from the small beginner in the business who thinks it necessary usually to go into everything from a sweet alyssum to the sweet banana tree. If you don't do a catalogue or shipping trade, limit your varieties of geraniums, fuchsias, verbenas, petunias and that kind of stuff to at least not more than one dozen varieties of each, and in some cases less. Select to grow what does best in your locality and what your customers are asking for.

There are few florists who now plant out any chrysanthemums in the open ground. They are bound to lose many leaves, however carefully lifted, and so they are all grown under glass in one way or another the whole year round. Still the best way to get good cuttings is to plant out a few of each variety you want to grow in the open ground. Let them grow as they like, and let the early frosts kill the tops. You don't care about the flowers. But before hard frost, dig up and pot the plants and you will get more and better cuttings off one of those plants than you will off twenty of the inside grown plants, and you won't have the fuss of lifting and potting any from the bench. But the quality of the cuttings is of the greatest consideration.

The best Hydrangea Otaksa I have seen this year were not planted out of doors, but they were planted in a violet house about the first of June from 2½-inch pots in five inches of soil and lifted on the first of October and put into 5-inch pots, kept under the bench till middle of February, and started into growth. They are now in 6-inch pots with an average of five large blooms to the plant. This may not be the best way to prepare plants for Easter, but they sell just as well now as they did then. There is one great advantage having them planted on the bench under glass; you can water and syringe them regularly and get a larger growth than you can in the field.

There is each year of late an increased demand for fine subtropical beds, and they are to be highly commended for several reasons. One, and an important reason, is that if properly planted the plants will take care of themselves and need no pinching or intelligent care except plenty of water, and that they are sure to get if planted on a city lot. Then again where the house is very large, and the lot comparatively very small, a bed of tall growing plants is much more in keeping with the surroundings than a bed of dwarf growing plants; and let me add that it is much more cooling and refreshing to look upon the broad green leaves of the caladium than it is to have a mass of scarlet geraniums to gaze on constantly. Here are some common and well-known plants that make a very effective and inexpensive sub-tropical bed; in the centre a group of the tall growing cannas, next a row of Caladium esculentum, next a row of some strong growing dark coleus, and finish off with an edge of Santolina incana. The Crozy



THE FERRIS WHEEL AT THE WORLD'S FAIR.

cannas of the better kinds are almost too good to mix up with other plants, and a more pleasing group cannot be had than a bed of seedling cannas of the Crozy type; their varied shades of color and height is just what is desired.

Don't neglect the young plants of cyclamen you sowed in the late fall or midwinter. They should now be in 3-inch pots, and either in a cold frame with the glass raised back and front, or in a cool house with an abundance of ventilation and some shade. WM. SCOTT.

Buffalo, May 22, '93.

The Ferris Wheel at the World's Fair.

Almost like a part of the anatomy of a big watch the giant Ferris wheel looms up into the sky above the Plaisance. It is intended for an observatory. The wheel proper will be 250 feet in diameter, built of structual iron and the top will be 264 feet above the ground. There will be practically two wheels, 28 feet 6 inches apart and connected by bracings. The wheel will turn on a steel axle of enormous size, 33 inches diameter, 45 feet 2 inches long and weighing 89,320 pounds. The passengers will sit in plate-glass-window cars and travel the full circumference of the wheel. The cars are always dependent and self-equalizing. The axle is supported on steel towers 137 feet high, each having four main columns, the two inner ones vertical and the two others inclined. There will be 36 passenger cars arranged on the rim of the wheel. Each car accommodates 60 persons. Passengers will be given two complete whirls, occupying about 20 minutes and going about one-third of a mile. The total weight of the structure is 4,300 tons, 60 per cent of which will be in motion. Two reversible engines aggregating 2,000-horse-power will be used to turn the wheel.

As seen in the picture the structure is not yet complete, and looking at it in its present condition one wonders whether there will ever be found a sufficient number of iron-nerved people to make a full load. Though engineers pronounce it absolutely safe spectators generally feel that they would like to see some one else take the first ride. Standing below and looking up, the men working at the top look like green flies hanging to the flower stem of a neglected rose plant.

Boston.

Indications for Decoration Day trade are very promising. This is one of the best paying occasions in the year for the Boston florists if outdoor flowers are plenty. The weather has been so warm that vegetation in general has caught up considerably and if it only continues a regular Decoration Day supply will be forthcoming. The quantity of decorative shrub blooms used up on this occasion is enormous. Harrisii lilies and astilbe are also in great demand.

The plant trade is just at its height, and the growers find no time at present for anything else. At the auctions the crowd in attendance is very large and prices obtained for first-class stock are fully equal to regular rates at the greenhouses.

Our friend Hugh Dickson from Belfast has just arrived in town via New York, and is accompanied by his father, Mr. Alex. Dickson. They expect to spend a fortnight seeing the points of horticultural interest in and about the Hub, before proceeding to the Chicago exhibition.

Messrs. W. A. Manda, Chas. B. Weathered and Winfried Rolker have all been in Boston during the week and rushing business.

Mr. C. M. Atkinson has a splendid show of cattleyas at Brookline. One whole side of a house is filled with C. Mossiæ in bloom. The outdoor show of early shrubbery, etc., is, as usual at this place, exceedingly fine.

Wild violets, ground phlox, silenes, aquilegias and hardy herbaceous plants in great variety are making the slopes and borders of the Back Bay Fens gay with masses of bright color just now. This pleasure ground is fast approaching completion, and will soon become one of the most attractive spots in the city.

Arthur Paulosky, recently with Bowditch & Co., Tremont street, has gone to take charge of the grounds of a new hospital just completed at Attleboro, Mass.

D. Gormley has gone to Chicago to join the army of Gallagher's employes.

Mr. C. V. Whitten is about to erect several more large rose houses.

Mr. A. T. Boddington, local representative for Pitcher & Manda, is enjoying a fine case of the whooping cough.

Philadelphia.

The essay prepared and read by Mr. Francis Canning on plant life before the Penna. Horticultural Society at its May meeting was a very able paper and very much appreciated by those who were fortunate enough to be present.

These monthly meetings of the society are not attended as they should be, but if the committee would provide such a treat as that of last Tuesday evening for each meeting there would soon be no cause for complaint.

The spring exhibition was again under discussion, and while all admitted that it would be a pity to have to discontinue the show, yet the fact that it always brought the society into debt could not be overlooked. After the matter had been talked over in an informal manner by Messrs. Cartledge, Heacock, Bearn, Farson, Reed and Kift, it was concluded that a better show would insure a better attendance, and we believe this to be the case. People are always willing to part with their money if they think they are getting a bargain, and the flower shows of to-day should be made so attractive that visitors will be loath to leave them.

There has been more stock than business the past week, carnations being especially plentiful; $1.25 a hundred is still asked for the best, and the first choice are fine, but by the thousand they can be bought for almost any price.

The fakirs seem to be making their headquarters on Eighth street, and on any fine day from twelve to fifteen can be counted in one block. They handle a great many carnations, the popular price being ten cents a dozen. Tea roses are also sold by them in large quantities at from 15 to 50 cents a dozen. The fakir fixes his prices to keep the stock moving, but gets all he can at the same time.

We knew a florist years ago who made up bunches to sell on the street for 25 cents, but told his boy to get all he could. When a passer-by asked the price it was 25 cents, when another admired and picked them up they were 35, but when some one came along in a hurry, picked up a bunch and said, "I'll take this, how much," the price was 50 cents.

Prices of roses are about the same as last week. Anderson's hybrids are all done, but he has a late house of Jacqs that will be ready in a few days.

The new White Perle, raised by J. Bevis, has been sold to a syndicate of growers who have great faith in their purchase. The original plant is still growing on the table where it sported, and while remaining true to its color, has done equally as well as the young plants of Perle that were planted on the same table last fall. This is the third season for it and proves pretty conclusively that it has come to stay. It is claimed that it will make a great addi-

tion to our summer roses and will not have to be thrown out as Marie Guillot is on the approach of cold weather, but will continue a salable and profitable rose the entire season.

David Colflesh, a brother of J. W. Colflesh, will shortly break ground for a range of houses at 54th and Springfield avenue, next to W. K. Harris' place. We wish him success.

Gurney Hill paid a flying visit to Philadelphia the past week.

George C. Watson has returned from his eastern trip and reports the trade wherever he has been in a flourishing condition, but fighting shy of new things.

A carload of specimen ferns will go out in a few days to the World's Fair from the establishment of H. A. Dreer. They are fine plants and have been grown especially for the Fair. K.

New York.

The supply of roses coming to the city has shortened up considerably during the past week, and as the season advances and one house after another is emptied of its contents the supply will continue to decrease. The period of overstock is probably finished for the time being. Steamer trade, Decoration Day and the school graduations will no doubt use up all good stock for the balance of the season. The immediate effect of the shortening up process has been to advance the price of roses to fully double what they were one week ago. The commission houses are cleaned out of good stock early in the day and the occupants of the 34th street market are getting their share of the activity. The quality of the roses is also on the downward track. Short stems are the rule with American Beauties and the blooms of all kinds of roses are soft and flabby. Mermets and Brides from some growers show considerable mildew. Carnations have become plenty again and prices are low. McGowan is holding out better than any other variety and the general stock of this variety is very fine indeed. Lily of the valley, if of good quality, sells better than at last report, even if outdoor grown. Orchids are seldom seen, but the decoration in one of the Broadway florists' window, formed of suspended plants of Odontoglossum citrosmum, is very effective and pretty.

There are indications of stiffening backbones here and there among the commission men in this city, with reference to those growers whose policy of making periodical changes from one commission house to another without warning has made the life of the commission man miserable. These men have had their own way long enough. Professing to believe every man to whom they consigned to be a rogue, they have done more by their talk and their actions to create discontent and discord in all branches of the business and to demoralize things generally than any other agency. The commission men have themselves partly to blame for the conditions that have prevailed, having by running after and soliciting supplies in the beginning of the season placed themselves at a disadvantage and opened the way to a course of browbeating and threatening. This relic of the past will soon follow its twin relic, the holiday storing of flowers into obscurity, and the sooner it does the better for all. It can be easily accomplished by a little concerted action.

Mr. John Young of Young Bros. sails for Europe per steamer La Touraine on Saturday, May 27, to enjoy a few weeks of well earned recreation. It is a long time since Johnnie has had a vacation, and all his florist friends will wish him a thoroughly good time, especially those who as members of the New York Florists' Club have had their interests so well looked after during his long service as secretary of that organization.

The projected exhibition under the auspices of the New York Florists' Club in connection with the Press Club Fair has been abandoned on account of lack of interest on the part of exhibitors and the feeling that with the stock available under the present conditions a creditable display could not be guaranteed.

Among the notable strangers arriving in New York during the past week were Mr. and Mrs. F. Sander of London, and Messrs. Alex. and Hugh Dickson of Belfast, Ireland, whose destination is eventually the World's Fair. It is Mr. Alex. Dickson's first trip to America.

The west is represented by Mr. J. C. Vaughan and Mr. E. G. Hill, both of whom, as usual, have their hands full of business, and Philadelphia by Alex Scott and Geo. C. Watson.

Mr. Chris. Butler has added two new rose houses to his range at Bayside. At the John Henderson Co's. considerable rebuilding is also going on.

Mr. David Rose had the misfortune to lose his wife by death, on May 19. The funeral took place at Brooklyn on May 21.

Ernst Asmus has opened the season by a trout fishing excursion with Benj. Dorrance at Willkesbarre, Pa.

Cards are out for the wedding of Mr. Henry Siebrecht, Jr. who is to be married to Miss Florence M. Titsworth on June 1.

Mr. Robt. B. Young has been ill for the past week, but the indispensable Patrick has seen to it that the auction sales have been carried on with accustomed spirit.

The display of tulips in Prospect Park, Brooklyn has been unusually fine this season.

Chicago.

Although flowers are very plentiful, giving prices a fluctuating tendency, business continues fairly good; certainly better than the average at this season. Last Saturday was an extremely busy day with the wholesalers, and they got rid of an immense quantity of flowers.

Roses are plentiful and good; the same is true of carnations; these comprise the bulk of the indoor flowers. Sweet peas are seen in increasing quantities, and pansies are very plentiful and cheap. Harrisii and longiflorum are just about gone; for the last week the few consignments coming in have been very poor in quality. Callas are still plentiful.

Outdoor flowers are very plentiful, though not all of first quality. There are complaints that a good deal of the bulbous stuff is coming poor, either because the bulbs were weakened by the excessive wet last year, or as the result of the drought this spring, which has been very trying to outdoor stuff. Both tulips and narcissus are affected in this way; the flower stalk appears in good condition until its final development, when the flower opens blighted and discolored. Still, in spite of this trouble, there are plenty of fine narcissus of various sorts, single and double, tulips, and valley.

Very fine white pæonies are now in; they bring a better price than the red. A large quantity of irises may be expected by Decoration Day. This is a very difficult flower to pack, in fact it is impossible to lay it in a box without injury, as it bruises so readily. Mr. Kennicott, who grows irises in quantity, has wire frames made to hold the bunches, so that they can be packed without the slightest danger of crushing. Lilac is of course, very plentiful and cheap—so, too, are those southern gardenias, which are seen in quantity at every street stand. The fakir is now in his glory.

Prospects for Decoration Day are very good; a good many advance orders have been given, and though it is not likely there will be much advance in prices business is sure to be brisk.

Cook & Co. is the style of a new firm that will start in business soon at 70th St. and Adams Ave. south side. W. C. Cook is the senior member of the firm.

Baltimore.

Though the weather has been fairly good and the demand for plants about up to the average, the old cry of hard times is heard every once in a while. Stories are told of good buds retailing for twenty-five cents a dozen in neighboring cities, and general demoralization in prices all around, but, though cut flowers are certainly very slow sale here, and at what seems paralyzing prices, yet we have not thought of offering good buds at two cents each yet, and will not, at least until the rush of June roses is on.

There is one consolation in all this talk of outside competition and low rates, and that is the fact that, if buds can be produced elsewhere for one cent each, they can be produced as cheaply here.

The city squares are beginning to get on their good clothes and look attractive. Surely not many places are more blessed in this way than Baltimore, for all over the city are little plats of shade, verdure and flowers, sometimes only the size of a city block, a few even less, but always a place of refreshment to the toiler on the way to or from work, always a spot for the invalid and aged, as well as the feeble little folks to take the air at mid-day. We may not always have the most excellent landscape effects in them, but we have a great number of them such as they are, and we are thankful even for the least of the number.

Now is the time when one appreciates being able to say what is, or is not to be had in the town in quantity, and yet how imperfect is our knowledge. If most of us were in great haste for plants of any particular kind the chances are we would telegraph to some other city, although they might be had of some one within a few miles. How would a monthly list kept at the Club answer, in which each member could have entered, any surplus stock for sale? A register of places vacant and men out of work was attempted and fell through, but it is certain that both the register and the stock list are good things if properly used.

These haughty autocrats, the hard coal men, are out already with the announcement that, "up go the prices to winter rates in July." There is surely some way of circumventing these gentry. Why not use soft or bituminous coal which remains about the same rate all the year? It may not be so serviceable for flues, but for boilers, and particularly steam boilers, it ought to do as well as the other, and though the price is not greatly over one-half as much, yet the consumption need not be more than one-fourth to one-third more. MACK.

Washington.

The unusual cool weather during the past week has interfered very materially

both with the sale of bedding plants and with the planting of the beds throughout the city. Yet the market florists seem to be busy, and still they complain of the dullness of spring trade. As one of the market men remarked, "the people seem to have no money." Geraniums in 4-inch pots are selling for $1.25 to $1.50 per dozen, Salvia splendens and heliotrope in 3-inch pots $1, Phlox Drummondii in 2 and 3-inch pots $1.20, petunias of good strains $1.50 to $2 from 3-inch pots, verbenas 25 to 50 cents per dozen, cannas in 4-inch pots 25 cents each, Crozy 35 to 50, according to size, roses from 25 to 75 cents each, according to variety, in pots from 3 to 5-inches.

The cut flower trade has been good during the past week. The presence of foreign officials has called society to the front again, which always means a season for the store florists. A number of breakfasts, luncheons and dinners have been given in honor of these distinguished visitors from abroad. The majority of the decorations have been with spring flowers, such as viburnum, weigelia, spiræa, deutzia, pæonia, lilac and iris.

Flowers of all kinds are plentiful, and the quality is excellent. Roses, with the exception of the red varieties, are abundant. Beauties are bringing from $3 to $6 per dozen, Woottons $1.50 to $2.50, Meteor $2 to $3, Brides $1.50, La France $1 to $2, Perles $1, Mermets $1.50, Kaiserin $3. The last named are very fine. Messrs. Strauss & Co., say the Kaiserin is taking the lead just now. Valley is getting scarce, and is bringing from 50 to 75 cents per dozen. Strauss & Co. propose to continue forcing valley all through the summer. They have surely hit upon the proper way to do this, the boxes they have on exhibition at their store demonstrating this fact. They are now offering for sale the finest I have ever seen.

The dinner given by Senator and Mrs. Brice in honor of the Grand Duke of Russia last Thursday, was one of the fashionable events of the season. Their elegant house never presented a more attractive appearance. Long stemmed American Beauty roses were used in profusion. The decorations of the dinner table was an immense oval of Adiantum Farleyense ferns, studded with long-stemmed American Beauty roses, laying flat, to appear as though they were strewn carelessly all over the beautiful bed of ferns. At each corner of the table were large, flat bouquets of the same rose and lily of the valley tied with broad bows of ribbon, the same shade as the roses, the ends being twined about and lost under the ferns. Palms and ferns were artistically arranged throughout the house. The entire decorations were by Messrs. J. H. Small & Sons. The above style of table decoration was adopted by Mrs. Brice when she first entered Washington society. She uses nothing but American Beauty roses, Adiantum Farleyense and lily of the valley.

The most conspicuous ornament of the private drawing room in the apartment of the Arlington Hotel, prepared for the Infanta Eulalia, was a huge bouquet of valley, American Beauty roses and orchids, sent by Mrs. Cleveland from the White House. On the table in the reception room was a cluster of sweet peas, tied with ribbon of the Spanish colors. The entire apartment was decorated with baskets and bunches of flowers, arranged in such a manner as to present a beautiful decoration in each room.

C. LESLIE REYNOLDS.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—By experienced salesman in florists' store. Good maker-up and designer. Nine years' experience. M., care Am. Florist.

SITUATION WANTED—By German florist just landed; competent in all branches; best references; reasonable terms. H N.
Grand View, Rockland Co., N. Y.

SITUATION WANTED—By a thoroughly experienced nurseryman and florist, as foreman. Excellent references; 12 years' experience in America. Address A. M., care American Florist.

SITUATION WANTED—A first-class situation for our fireman, who desires to advance his interests. Thoroughly competent and trustworthy; good pipe fitter, etc. Married, three children. Apply
ANCHORAGE ROSE CO., Anchorage, Ky.

SITUATION WANTED—By practical gardener, 25 years' experience in growing flowers, stove and greenhouse plants, fruit, vegetables; also landscape work; English; married; no family; aged 42; 5 years with present employer; best of references.
Address F F, Elm Grove, Wis.

SITUATION WANTED—By a man of 31; starvation not wanted; there is plenty of room out of doors to sleep in, so no potting shed apartment wanted. Wages to be paid weekly, cash. Willing to do a man's work not a slave's. For particulars address
WORKINGHAND, care American Florist.

WANTED TO RENT—Empty greenhouses near a big city, to raise cut flowers.
A B C, care American Florist.

WANTED SOON—A sober, reliable, single man, thoroughly competent, as florist and gardener. Call or address MOSES LARGES,
901 Grand River Ave., Detroit, Mich.

WANTED—Young man with $1,000 to loan employer for light work with a florist. Security given for loan and permanent situation to man of ability.
Address, W care American Florist.

WANTED—Single man of energy and ability for roses and cut flower stock. Address with terms and experience. J. T. WILLIAMSON,
Prop. La Rose Gardens, Memphis, Tenn.

WANTED—Young man as assistant in cut flower store; must have experience in the business; first class references required; state nationality and wages expected. C. A. DAHL & CO., Atlanta, Ga.

WANTED—If Robt. Caughley, formerly in the employ of S. D. Bradford, Colorado Springs, Colo., will communicate with him he will learn something to his interest. Mr. Caughley when last heard from was in St. Paul, Minn. S. D. BRADFORD.

WANTED—Three good men in greenhouses; must be sober, able and energetic. Address with terms, experience and references to
WILLIAM PLUMB, Mangr. West View Floral Co.,
West Atlanta, Georgia.

WANTED—Protestant, American, German, Scotch or Swede; must be steady, sober, reliable, honest, and have practical experience in making of mushroom beds and taking care of N. H. grapes. Inaccommodating or conceited loafers need not apply. Fair wages and per cent. of our established business to a worthy man willing to work hard to my interest.
ALFRED E. BAKER, box 267, West Chester, Phila., Pa.

TO RENT—6 houses in Chicago with 11,000 feet of glass, stocked with forcing stuff, roses, carnations, violets, smilax, etc. Address
R P, care American Florist.

FOR SALE—First class florist store in city of Chicago, established. Owner has other interests to look after that will occupy his entire time. Price reasonable. Address W M H, care Am. Florist.

FOR SALE CHEAP—Second hand No. 1 Exeter boiler, 18 sections, 25 horse power, as good as new; steam gauge, water gauge all complete. Price $300. This is half the price of new. Address
J. G. BURROW, Fishkill, N. Y.

FOR SALE—Good florist business and greenhouse, 20 miles from Indianapolis, Ind. Reasons for selling: conducted by a lady, and more than she can do. If sold in next 30 days will make a bargain. Address A L B, care American Florist.

FOR SALE—On Neponset street, in Canton, Mass., seven minutes walk from Junction depot; splendid location; 13,428 square feet of land with greenhouse 50x20, glass 14x12, cypress wood; price $800. Apply to
CHARLES BEATTY, 409 West River, street,
Readville, Mass.

FOR SALE—Controlling interest in old established seed store. Contracts for 1893 all placed. Large growers of onion sets. Must get out of business on account of failure of my eyes. Suitable terms on good security. Address
SEEDSMAN, care American Florist.

FOR SALE—Florist business, consisting of 2 new greenhouses 100x23 feet and 50x16 feet, also new 9 room dwelling, all heated by the Furnau steam boiler. Three lots, each 50x180 feet. Fine location in a rapidly growing city, 1 hour's ride from Chicago. Will be sold at a bargain on account of poor health. Apply to J. B. MODERWELL,
Masonic Block, Waukegan, Ill.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

SPLENDID OPPORTUNITY—To let on lease for eight or ten years, a large property for greenhouses in most desirable locality; extra good home market. Church near by, street cars running past premises, and within twenty minutes' ride of public buildings. Address J. W. Moore, St. Vincents' Seminary, Germantown, Philadelphia, Pa.

FOR SALE.

Nice greenhouse in the most fashionable part of the city. Sell at a bargain. Cost to run it per month, including rent of $2.00, is $100.00. Receipts will average $300.00 per month, and can be increased. Good reasons for selling. Address
W. B. LEEDY & CO., Birmingham, Ala.

FOR SALE.

An old established florist business, containing about 10,000 feet of glass, four large grape and four plant houses in good order, heated with hot water, steam pump, tanks, etc. Property is free and clear. Terms easy; from 2 to 6 acres of land; 30 minutes from Grand Central Station, N. Y. City; 75 trains daily; 10 minutes from depot. This is a rare chance for the right party. For particulars apply to E. HUCKINS, Yonkers, N. Y.

FOR SALE.

The Oldest Seed and Florists' Store in New Orleans

on account of retiring from store business, a large selected stock and good patronage from the best class of customers in the city. Address

R. E. SIMONS,
NEW ORLEANS, LA.

FOR SALE OR TO RENT.

The following greenhouse property, situated on the outskirts of Springfield, the City of Houses; or will sell Greenhouses, Stock and Fixtures and give ten years' lease of 2 acres land. Ten houses in all—5 houses, 10 feet wide, 65 feet long; 4 houses, 18 feet wide, 65 feet long; 1 house, 18 feet wide, 65 feet long. Steam plant! New double Florida Boiler. Stock in good condition, with a large and extra good home market. This is an opportunity in a life-time, as present owner has other interests to look after. If you are looking for a chance, apply at once to

N. D. WINTER,
5 Elm Street, SPRINGFIELD, MASS.

TAKE YOUR CHOICE.

FOR SALE—An old established Florist Business at Dorchester, Mass., comprising 20,000 feet of land centrally located, on which are: 1 house 70x16 filled with Carnations; 1 house 70x16 filled with Roses; 1 house 70x11 filled with Violets; 1 house 70x10 filled with Violets; 1 sash pit 70x7 filled with Violets; 1 dwelling house 7 rooms. Plants in good condition and houses in good repair. Price $6,000.

FOR SALE OR RENT—A well equipped establishment within eight miles of Boston, comprising 8 acres of land on which are 1 house 130x20 filled with Mermets and Silver Sprays; 1 house 100x24 filled with Wilders and Plants; 1 house 100x11 filled with Wilders; 1 house 100x11 filled with Adiantums, 9-in. pots; 1 house 100x11 filled with Callas and Bouvardia; 1 house 100x11 filled with Callas, Bouvardia and Portia; 1 house 100x11 filled with Violets and Mignonette; 1 heated frame 100x6 filled with Mignonette; 1 propagating house 75 ft. long. Price $22,000.

FOR SALE—Eight miles from Boston. 1 acre of land, 8,000 feet of glass, including 4 houses, 100x18, 1 dwelling house 7 rooms. Apply to

N. F. McCarthy & CO. 1 Music Hall Place, Boston Mass.

ASSIGNEE'S PUBLIC SALE.

COTTAGE PLACE GREENHOUSES.

On Monday, May 29th, 1893, the undersigned assignee of A. Bitner and wife, will by virtue of an order of the Court of Common Pleas, of Lancaster Co., Penn., sell at public sale at the Leopard Hotel in Lancaster, Penn., the celebrated Cottage Place Greenhouses, adjoining Lancaster, with city office No. 16 Center Square.

These well known greenhouses will be sold in two arts The older plant, being all east of West street, consisting of 15 greenhouses, with about 30,000 square feet of glass, three large boilers, pumping engine, two stand pipes, containing 70,000 gallons, wells, pumps, steam heating pipes, etc., etc., together with boiler house, stable, wagon shed, and other necessary buildings.

Second; the new plant, consisting of a lot of ground, 208 feet from on the west side of West street, and 100 feet deep, on which are erected 10 greenhouses, with about 20,000 square feet of glass and two large boilers in position. This plant is not finished, the pumping and heating arrangements not being completed.

A very accurate map of these properties can be seen at the office of W. F. Beyer, Esq., No. 43 Grant street which intending purchasers should consult.

Lancaster County, Penn., is recognized everywhere as the "garden spot" of the Union, and the soil of this locality is unequalled even in this county for the production of roses, carnations, and indeed all kinds of flowers.

The advantages for shipping are unexcelled, having both the Pennsylvania and the Reading systems, with all their connections.

To those desiring to enter the greenhouse business this sale offers the best possible opportunity.

Mr. A. Bitner, adjoining the premises, will show the properties.

Sale to begin at 7:30 P. M., when terms will be made known by

R. J. HOUSTON,
Assignee of A. Bitner and wife.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser in these columns.

A Fruitless Industry.

When will the people in the south learn that it is a waste of time and trouble to ship large quantities of outdoor flowers to the northern florists in spring time? Every year there springs up a new crop of misguided people who seem to think that all they have to do to get rich is to go out into the fields and gather daisies, buttercups and the like by the bushel and send them by express to such florists in the north as have been unfortunate enough to have their name and address spread broadcast in the horticultural papers. Here is one instance of how inconvenient it is to be famous. And how the poor victim squirms, as, after parting with his good dollars for the benefit of the express man, he opens the box only to find that his money has gone for a lot of unsalable rubbish. And then the only relief for him is to find consolation in profanity.

Our brethren and sisters in the sunny south should bear in mind that at the time their fields are bright with spring flowers we in the north are passing through the period of greatest glut in choice flowers. In the big cities the finest productions of modern floriculture are seeking a market at any price. American Beauties, La France, Jacqs, carnations and violets are heaped up on every street corner, where they are pushed in the faces of passers-by, in hands that have long been innocent of soap and water, and all for a few cents!

There are times when certain productions of the south, magnolias, Cape jasmines, daffodils and lilacs possibly, may find a remunerative market in the northern cities, but those times are comparatively rare and the quantity that can be handled to advantage is limited. The only way to strike it is by previous correspondence with some reliable house that will give a definite order. To send otherwise and trust to luck is to court sure disappointment.

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

COMMENCEMENT BASKETS.

FOR THE SCHOOL GRADUATE.

There is no present so fitting and appropriate in every way as a handle basket filled with choice flowers.

You can convince your customers of this if you only have a good line of suitable baskets on hand to show. In fact our baskets will sell themselves. If you are wise you will place an order at once. Select from our wholesale list which we mail on application, or leave it to our judgement to select you an assortment. Your order will be filled promptly from fresh stock and at bottom prices.

On Wheat Sheaves, Immortelles, Metal Wreaths and all lines of Florists' Supplies we can please you. Send for our reduced price list.

H. BAYERSDORFER & CO.,

WHOLESALE ONLY. 56 N. 4TH ST., PHILADELPHIA, PA.

Cape Flowers, new crop in best white quality at $1.00 the lb.; 10 lb. lots, $9 net.

Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 28-in. upwards, at 40c., 45c., 50c., 60c., 75c. and $1.00 each, according to length.

Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.

Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.

Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc. For prices consult our

Trade Catalogue, mailed free.

August Rölker & Sons,

136 & 138 W. 24th St., P. O. Station E. **New York.**

ROSES.

Good strong healthy plants, our selection, from 2½ inch pots, per 1,000, $25.00.

SMILAX

15 CENTS PER STRING.

Special quotations for the balance of the month on Waban, Wootton and Soupert roses from 2½, 3½ and 4½ inch pots. Also American Beauty from 4½ inch pots.

Write us for list of other varieties on hand and prices.

THE NATIONAL PLANT CO.

DAYTON, O., U S A.

FOR SALE CHEAP.

A FINE LOT OF

MERMETS,	BRIDES,
PERLES,	LA FRANCE,
ALBANY,	PAPA GONTIER,
AM. BEAUTY,	PIERRE GUILLOT.

Address A. T. JACKSON, Bowmanville, Ill.

IF YOU NEED ANY

Cape Flowers, Immortelles, Grasses, plain or fancy **Baskets, Metal Wreaths, Letters, Doves,** or any other thing in the Florists' supply line, mail us your order.

REMEMBER WE ARE THE

Leading Manufacturers of Wheat Sheaves and Baskets, and Importers of **Florists' Supplies.**

Catalogue on application.

ERNEST KAUFMANN & CO.,

113 N. 4th Street. *PHILADELPHIA, PA.*

ROSES.

PERLES, 2¼ inch, $5.00 per 100.

PERLES, 2¼ inch, $45.00 per 1,000.

JOHN BURTON,

Chestnut Hill. PHILADELPHIA, PA.

CATALOGUE PRINTING. ELECTROTYPING.

Done with expert ability for Florists Nurserymen, Seedsmen. Write to

J. Horace McFarland Co.,

HARRISBURG, PA.

Hybrid Perpetual Roses,

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.

Price Lists to applicants. Address

WILLIAM H. SPOONER,

JAMAICA PLAIN, (Boston), MASS.

STRING

Your Smilax and other trailing plants with

GREEN SILKALINE.

Same cord can be used with plants when decorating. For samples and prices, address

JOHN C. MEYER & CO.,

289 Devonshire Street, BOSTON, MASS.

ROSES.

Finest stock in Northwest

Duchess of Albany,	Mme. Hoste,
La France,	Niphetos,
Catherine Mermet,	Perle,
Waban,	Sunset,
The Bride,	W. F. Bennett.

C. A. SMITH FLORAL CO.

77 7th Street, South, MINNEAPOLIS, MINN.

WHITE DOVES

FOR FLORISTS.

Largest and finest stock in the United States. Write for prices to

S. J. RUSSELL,

850 Montgomery St., Jersey City, N. J.

MARSCHUETZ & CO.,

Florists' Supplies,

23 & 25 N. 4th St., PHILADELPHIA, PA.

Send for Catalogue.

Do you want an alphabetical list of the chrysanthemums in commerce in America, with class and a brief accurate description of each one, and synonyms noted? You will find such a list in our trade directory and reference book.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST. . . . . .

ANCHORAGE ROSE CO., Anchorage, Ky.

What Rose is always in demand?
"AMERICAN BEAUTY."
Which is the only large Rose that can be had all the year round?
"AMERICAN BEAUTY."

WHAT NEW ROSE IS A FIT COMPANION TO BEAUTY?

"American Belle."

"AMERICAN BELLE"
has carried the highest honors wherever shown—New York, Boston, Chicago, Philadelphia, Cincinnati and elsewhere throughout the United States. . . .

$60 per 100; $400 per 1000. 25 at 100 rate, 250 at 1000 rate.

JOHN BURTON, Chestnut Hill, Philadelphia, Pa.

Golden Returns.

200,000 ROSES 200,000

We offer well established, healthy plants in below named and many other sorts:

From 2-inch pots, $ 3.00 per 100; $30.00 per 1000
From 3-inch pots, 6.00 " 60.00 "
From 4-inch pots, 12.00 " 120.00 "
Not in excess of any one variety.

50,000 Hybrid Perpetual Roses 50,000

at $4 per 100; $40 per 1000, in 50 select varieties.

New and Rare Varieties at Special Rates given in our Wholesale List, now ready.

WE NAME A FEW SORTS ONLY:

Aurora, Bosanquet, Comt. de Labarthe, Bon Silene, Cels, Devoniensis, C. Mermet, Etoile de Lyon, Hermosa, Mme. Cusin, H. M. Stanley, Malmaison, Marie Guillot, Mme. Lambard, Marie Lambert, Marechal Niel, Kruger, Niphetos, Mme. Jos. Schwartz, Safrano, Perle des Jardins, Sombreuil, The Bride, etc., etc.

For anything in the Florist line, or send your lists to be priced. Address

NANZ & NEUNER,
LOUISVILLE, KY.

WATTEVILLES,
METEORS,
BRIDESMAIDS
FRANK L. MOORE,
CHATHAM, NEW JERSEY.

The New White Rose
KAISERIN AUGUSTA VICTORIA.

From 3-inch pots, $25.00 per 100.

JOHN COOK,
318 N. Charles St., BALTIMORE, MD.

ROSES.

TEAS . . . . . $30.00 per 1000
HYBRIDS . . . . . 40.00 per 1000
Healthy plants, in 2-inch pots.

Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.
Trade list on application.

Jacob Schulz,
LOUISVILLE, KY.

Gladiolus, light shades predominate, $1.00 per 100.
Alternanthera, red and yellow, good stock, $2.75 per 100.
Centaurea Gymnocarpa, good stock, $3.00 p. 100

McCrea & Cole, Battle Creek Mich.

ROSES.

MME. CAROLINE TESTOUT—The beautiful new hybrid Tea Rose, $25.00 per 100; $200.00 per 1,000,

HEINRICH SCHULTHEIS—An excellent pink hybrid Remontant Rose for very early forcing, $7.00 per 100; $60,00 per 1,000.

Chrysanthemums.

MRS. CRAIG LIPPINCOTT—Awarded a silver medal at Philadelphia, November, 1892. Yellow in color, VERY EARLY; large flower, broad petals. $3.00 per dozen.

TUXEDO—A beautiful orange colored flower, the best of this color for cut flowers. This should be grown in large quantities, so that the admirers of the Princeton College boys can get a color to their taste. $1.50 per dozen; $10.00 per 100.

EDWIN LONSDALE,
CHESTNUT HILL P. O. PHILADELPHIA, PA.

ROSES
FINE HEALTHY PLANTS FROM 2¼-INCH POTS.

Perles, Brides, Mermets, Niphetos, Papa Gontier, Hoste, Watteville, Cusin,
La France, Albany, Wootton, at . $5.00 per 100, $45.00 per 1,000.
Meteor at . . . . . $6.00 per 100, $55.00 per 1,000.
Climbing Perle, at . . . . . $10.00 per 100.

John Henderson Co.,
FLUSHING, N. Y.

ROSES AND CARNATIONS.
The Largest and Finest Stock in the Northwest ever offered at the following prices:

ROSES.—American Beauties, from 2½ inch pots, $7.00 per 100; from 3 inch pots, $9.00, and from 4 inch pots, $12.00 per 100.
Meteor, from 2½ inch pots, $5.00 per 100; from 3 inch pots, $8.00, and from 4 inch pots, $10.00 per 100.
Perles, LaFrance, Mermet, Bride and Niphetos, from 2½ inch pots, $4.00 per 100; from 3 inch pots $6.00, and from 4 inch pots, $9.00 per 100. Per 1,000, send for special quotations.

CARNATIONS.—The leading varieties, from inch pots, $3.00 per 100; per 1,000, from flats, $20. 0.
BEDDING PLANTS.—Large stock in full bloom.
CUT FLOWERS.—At lowest market prices.

Telegraph Orders Promptly Attended To.

CHRIST. HANSEN, Wholesale Florist, St. Paul, Minn.

Madam Chas. Wood $5 per 100; $45 per 1000. 4 inch, $12 per 100. **Forcing Roses** in the best of health and vigor.

M. A. HUNT, Terre Haute, Ind.

FLORAL DESIGNS
The Cut Flower Worker's friend. Fine book of 160 pages. Send $3.50 for it, to
I. HORACE McFARLAND, Harrisburg, Pa.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

Decision Regarding Duty on Plants.

Forcing plants—Clematis, Daphne cneorum, and herbaceous pæonies.

Before the U. S. General Appraisers at New York, April 10, 1893.

In the matter of the protest, 43185a-2785, of Merchants' Dispatch Transportation Company, against the decision of the collector of customs at New York as to the rate and amount of duties chargeable on certain clematis, Daphne cneorum and herbaceous pæonies, imported per *Amsterdam*, November 18, 1892.

Opinion by LUNT, *General Appraiser.*

The merchandise covered by the protest consists of roots, plants, or shrubs, to-wit, clematis, Daphne cneorum, and herbaceous pæonies, which were entered at New York, November, 18, 1892, and assessed for duty at 20 per cent. ad valorem under paragraph 282, N. T.

The importers claim that said merchandise consists of plants solely for forcing under glass and for decorative purposes.

We find that these roots, plants, or shrubs are not chiefly used for forcing under glass for cut flowers or decorative purposes. (See G. A. 1226, 1918.) While sometimes put under glass to insure early growth, they are hardy and are chiefly grown out of doors. The protest is overruled.

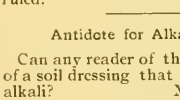
Antidote for Alkali Wanted.

Can any reader of the FLORIST tell me of a soil dressing that is an antidote for alkali? MRS. D. J. KNOX.

Butte, Mont.

Please mention the AMERICAN FLORIST every time you write to an advertiser.

TRADE MARKS COPYRIGHTS.



SOLICITOR OF U. S. AND FOREIGN PATENTS.
Atlantic Building, Washington, D. C.
(Send sketch or model for free examination as to patentability.)

WORLD'S FAIR ACCOMMODATIONS

Members of the trade visiting Chicago during the World's Fair can find good, clean lodgings within short distance of World's Fair entrance at one dollar per day. Address manager

CHICAGO CUT FLOWER EXCHANGE
45 LAKE STREET.

JULIUS TESMER & CO.
Manufacturers of all kinds of
Ice Boxes
AND STORE FIXTURES,
937 to 943 N. Western Ave., CHICAGO.

ORCHIDS.

I am handling the finest stock of Cut Orchids grown in this country and can supply them in any quantity. Also all other Choice Flowers.

T. J. CORBREY,
Wholesale and Commission Florist,
Consignments Solicited. 45 Lake St., CHICAGO.

BOUQUET GREEN, ...
. . . HARDY CUT FERNS.
EVERYTHING GREEN
At H. E. HARTFORD'S,
18 Chapman Place. BOSTON.

Asparagus Plumosus Nanus.
CUT STRINGS; 6 to 10 feet long, 50 cents each. 12 to 18 feet long, $1.00 each.
In large or small quantities all the year round. The largest stock in the country.
W. H. ELLIOTT, Brighton, Mass.

We are the People!
Who? KOFFMAN,
Where? WALDEN, Orange Co., N. Y.
What? SMILAX
25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.
When? ALL THE YEAR AROUND.
Also Adiantum Cuneatum Fronds
At $1.25 per 100.
And he pays the Express.
Mention American Florist.

Cut Blooms Carnations

	Per 100
Assorted, long stems	$1.00
White, long stems	1.25
White, short stems	.60

Address J. G. BURROW, Fishkill, N. Y.

Do You Use Ferns?
Finest and Cleanest in the Land.
Hardy Dagger Cut $1 per 1,000.
G. W. CURREY & CO.
Give us a trial. NASHVILLE, TENN.
Mention American Florist.

WHOLESALE FLORISTS
La Roche & Stahl
N. E. CORNER
13th & Chestnut Sts.,
PHILADELPHIA.

SAMUEL S. PENNOCK,
Wholesale Florist
REMOVED TO REAR OF 42 S. 16th ST.,
Philadelphia, Pa.

CAPE JASMINE.
The large flowering variety
$2.00 . . . . . per 100
17.50 . . . . . per 1000
Can be shipped with perfect safety to any address.
GRAND SELLER.
TRY THEM.
Terms Cash. . . . . .
TEXAS SEED AND FLORAL CO.
362 Elm St., DALLAS, TEXAS

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.
Decoration Day price list, taking effect May 27.

	Per 100
Perle, Gontier, Niphetos	$3.00@$4.00
Mermets, La France, Bride	4.00@ 5.00
Meteors	6.00
Carnations, short	1.00
" long	2.00
Valley, Tulips, Narcissus	2.00@ 3.00
Adiantum	1.00
Callas, Harrisii	8.00@12.00
Smilax	16.00@18.00
Peonias	6.00
Asparagus Plumosus	50.00
Jasmine	2.00@ 3.00

In effect till next issue of this paper.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
126 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.; Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange.
45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY,
Wholesale and Commission
FLORIST,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

A. G. PRINCE & CO.,
Wholesale and Commission
FLORISTS,
45 LAKE STREET,
In Chicago Cut Flower Exchange. CHICAGO.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

Wholesale Markets.

Cut Flowers.

NEW YORK, May 23.

Roses, Gontier, Perle, Niphetos	1.00@ 3.00
" Mermet, Bride, Hoste	2.00@ 4.00
" Cusin, Watteville, Meteor	1.00@ 3.00
" Bridesmaid, La France	3.00@ 6.00
" Jacqueminot, Testout	3.00@10.00
" Beauty, Hybrids, Moss buds	5.00@20.00
Carnations	.50@ .75
Valley	1.00@ 1.50
Longiflorum	3.00@ 6.00
Cattleyas	50.00
Mignonette	1.00@ 4.00
Sweet Peas, per bunch	.10@ .20
Adiantums	1.00
Smilax	15.00@25.00

BOSTON, May 23.

Roses, Niphetos, Gontier	3.00@ 4.00
" Perle, Sunset	3.00@ 4.00
" Bride, Mermet	3.00@ 6.00
" Jacq., Hybrids	10.00@15.00
Carnations	1.00@ 2.00
Violets	.50
Longiflorum	4.00@ 6.00
Candidum	3.00@ 4.00
Lily of the valley, tulips, daffodils	2.00@ 3.00
Mignonette	2.00@ 3.00
Pansies	.25
Adiantum	1.00
Smilax	17.00@25.00
Asparagus plumosus	50.00@100.00

PHILADELPHIA, May 23.

Roses, Brunners	15.00@25.00
" Lainas	15.00@20.00
" Beauties	15.00@25.00
" Belles	25.00
" La France	3.00@ 4.00
" Mermet, Bride	4.00@ 5.00
" Cusin, Watteville	3.00@ 4.00
" Jacqs.	8.00@10.00
" Perle, Gontier	2.00@ 3.00
Valley	1.50@ 2.00
Carnations	.75@ 1.50
Mignonette	1.00@ 2.00
Asparagus	60.00@75.00
Smilax	20.00@25.00
Adiantum	1.00@ 1.25
Harrisii	5.00@ 6.00
Callas	5.00@ 8.00
Sweet peas	1.00@ 2.00
Cypripedium Lawrenceanum	.15

CHICAGO, May 23.

Roses, Perles, Niphetos Gontier	3.00@ 4.00
" Mermet, La France, Albany	4.00@ 5.00
" Brides, Wootton, Bennett	4.00@ 5.00
" Beauties	10.00@15.00
" Meteors	6.00
" Jacqs.	12.00@18.00
" Hybrids	12.00@18.00
Carnations (short)	.75@ 1.00
" (long)	1.50@ 2.00
" (fancy)	2.00@ 2.50
Callas, Harrisii	8.00@12.00
Romans, Valley	3.00
Violets	1.00
Sweet Peas	1.00@ 1.50
Peonies	6.00@10.00
Daffodils, tulips	3.00@ 4.00
Cape Jasmine	2.00@ 3.00
Smilax	16.00@18.00
Adiantum	1.00
Asparagus	50.00

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

WHOLESALE
FLORISTS,
JOBBERS IN . . .
. . FLORISTS' SUPPLIES,
FLORISTS' VASES.
METS,
BRIDES,
GONTIERS,
CARNATIONS,
ALWAYS ON HAND.
1 Music Hall Place,
BOSTON, MASS.
HORTICULTURAL AUCTIONEERS. . .
Mention American Florist.

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., BOSTON, MASS.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
The finest Roses, Violets and Carnations
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE
FLORIST,
1122 PINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STEET,
St. Louis, Mo.

The Seed Trade

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1893. Applications for membership should be addressed to Wm. Meggatt, chairman membership committee, Wethersfield Conn.

MR. W. ATLEE BURPEE will visit the Exposition this week. Mr. John Lewis Childs is expected about June 1.

A. HERRMAN, of E. 34th St., N. Y., has sold his seed business to his brother and will devote his time to the metallic wreath business.

Pittsburg.

A terrific hail storm destroyed an immense amount of glass here last Saturday afternoon, the 20th inst. Among those who lost heavily were John R. & A. Murdoch, P. S. Randolph, B. A. Elliott Co. and Beckert Bros. Serious damage was also done to the new Phipps conservatory in Schenley Park and to the conservatories in the Allegheny City Park. Plants were badly cut to pieces, and this in addition to the broken glass, makes the losses to the florists very heavy.

DENVER, COLO.—Mr. Bernard Beer has purchased 10 acres of land at the corner of Colfax Ave. and York St., where he will erect 9 greenhouses, of which two will be 20x100 each, five 18x125 each, and two of small size, for violets. The business will be conducted under the title "The Colfax Floral Co." Mr. Beer is now in Chicago buying material.

ROSES,
CARNATIONS AND VIOLETS,
STRONG PLANTS,
WRITE FOR PRICES.
Kemble Floral Co.,
OSKALOOSA, IOWA.

Send for Catalogue of
JAPAN BULBS, SEEDS, AND SHRUBS.
ARAUCARIAS,
AUSTRALIAN Palm Seeds,
CALIFORNIA BULBS AND SEEDS to
H. H. BERGER & CO.
ESTABLISHED 1878. SAN FRANCISCO, CAL.

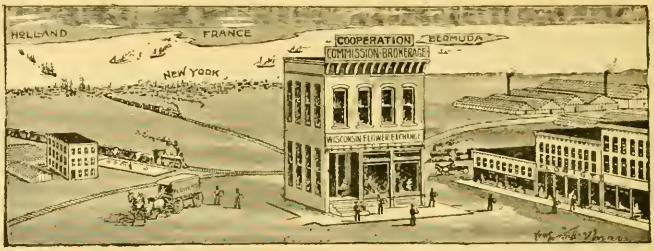
MAGNOLIAS
OBOVATA GRACILIS AND PURPUREA.
Fine, bushy plants, 3 to 8 feet, from $25.00 to $200.00 per 100.
Send for descriptive catalogue and wholesale price list free to all in the trade.
SAMUEL C. MOON,
MORRISVILLE, Bucks Co. PA.

DO YOU WANT ANY?

	Per 100.	Per 1000.
Ivies English, one year old	$5 00	$40 00
Alternanthera, red or yellow	3 00	25 00
Echeveria Glauca, 2-2½-inch diam	3 00	25 00
Daisies, hardy red or white	3 00	25 00
Pansies, strong plants, good strain	3 00	25 00
Coleus, rooted Golden bedder and Verschaffeltii	1 00	7 50

Sweet Pea seed, our own growing, finest varieties mixed 65c. per pound. (Cash must accompany all orders.)
JOHN RECK, Bridgeport, Conn.

MEXICAN PRIMROSES.
(Œnothera Rosea.)
Fine plants, per 100, Apple Blossom, $3.00; Hermosa tinted, $3.00; Cooperia Pedunculata, 1st size, $3.00; 2nd size, $2.50; Cooperia Drummondii (ready in May) $1.50; Zephyranthes Andersonii Texana (Miny), $1.50; Crinum Zeylanicum, C. Careyanum, C. Sanderianum, C. Latifolium, $2.00 each, $20.00 dozen.
Carriage paid when cash accompanies order.
MISS LIZZIE FREEMAN,
1203 East Ave., AUSTIN, TEXAS.



BULBS. **BULBS.**
VALUABLE FOR GROWERS. VALUABLE FOR DEALERS.
We are prepared to sell the following stock at prices and in quantities to accommodate anyone.
AMARYLLIS Johnsonii in sizes 5 to 9, 9 to 12, 12 to 16.
" Regina in sizes 4 to 8.
CALLAS in two sizes.
GLADIOLUS Shakespeare, Isaac Buchanan, La Candeur, John Bull.
TRILLIUM GRANDIFLORUM, good for forcing for Xmas, Easter or any other time. We can supply them in almost any desired quantity if ordered soon. Prices quite low; ready for delivery in July, Aug. or Sept., but should be ordered now.
CORRESPONDENCE SOLICITED.
THE WISCONSIN FLOWER EXCHANGE, 131 Mason St., Milwaukee, Wis.

We Grow.....
BULBS
SEGERS & CO., BULB GROWERS,
LISSE near HAARLEM, HOLLAND.
Catalogues will be mailed free upon application if not received.

R. VAN DER SCHOOT & SON,
HILLEGOM, - HOLLAND,
Largest Growers of
HYACINTHS, TULIPS, NARCISSUS, SPIRÆA, LILIES OF THE VALLEY, ETC.
HEADQUARTERS FOR HIGH GRADE FORCING BULBS.
Wholesale Importers should write us for Prices.
OUR NEW TRADE LIST NOW READY.

Write for Wholesale List.
MICHEL PLANT AND BULB CO.,
ST. LOUIS, MO.

LILIUM HARRISII.
Original and largest growers of this important bulb.
OUR SPECIALTY!
True Stock. Lowest Prices. Best Quality.
F. R. PIERSON CO.,
TARRYTOWN-ON-HUDSON, NEW YORK.

HULSEBOSCH BROS.,
BULB AND PLANT GROWERS,
OVERVEEN, near Haarlem, HOLLAND.

	Per 100	1000
Lilium Harrisii, 4 to 5-inch in circ	$2.30	$19.00
" " 5 to 7-inch in circ	3.00	24.00
" " 7 to 9-inch in circ	5.25	47.00
" " 9 to 12-inch in circ	11.00	100.00
Lilium Longiflorum 10 per cent dearer than Lilium Harrisii.		
Roman Hyacinths, extra selected	2.50	22.00
" " top roots	3.00	25.00
Narcis. Totus Albus, extra selected	1.00	7.50
" " " Grandiflor'm, ext. s'l'c'd	1.50	11.00

Full Wholesale Catalogue now ready. Address
A. HULSEBOSCH,
P. O. Box 3118. Warehouse 58 West Street,
NEW YORK CITY.
Mention American Florist.

G. J. MOFFATT,
Manufacturer of
PAPER BAGS AND ENVELOPES
Special attention given to
Seed Bags and Catalogue Envelopes.
NEW HAVEN, CONN.
Mention American Florist.

SEGERS BROTHERS

Offer HYACINTHS, TULIPS, DAFFODILS,

And all other bulbs for forcing and outdoor, in very fine quality, at reasonable rates.

If any of our friends have not received a copy of our Catalogue of 1893, should write for one at once.

Please ORDER ON RECEIPT of our catalogue.

SEGERS BROTHERS,

WHOLESALE BULB GROWERS,

LISSE, near Haarlem, **HOLLAND.**

Some Interesting Bulbs. Good Stuff and Cheap, offered by

LETELLIER & SON,

CAEN, FRANCE.

Quantities to Dispose of	Per 1,000
40,000 Amaryllis lutea	$13.00
20,000 Anemone Chinensis	4.00
35,000 Arum Dracunculus	30 00
300,000 Chionodoxa Luciliæ	4.00
200,000 Chionodoxa Sardensis	4.00
80,000 Chionodoxa Cretensis	5 00
50,000 Cyclamen Hederæfolium	17.00
20,000 Colchicum Aprippinæ	8.00
20,000 Colchicum Flora Alba	6.00
10,000 Convallaria Multiflora	8.00
35,000 Fritillaria Armena	7.00
500,000 Galanthus Elwesii	4 00
35,000 Galanthus Imperati	9.00
30,000 Iris Germanica var	14.00
40,000 Lilium Candidum	11 00
38,000 Ornithogalum Arabicum	10.00
20,000 Pancratium Maritimum	14.00
60,000 Scilla Bifolia	4.00
40,000 Tulipa Sylvestris	4.00
20,000 Chionodoxa and Galanthus, extra selected bulbs	6.00

Prices are free on board at Havre.

We offer quotations on all other French specialties.

Palm Seeds—The largest assortment in Europe. Ask for special list. You may direct your orders to

MR. ANDRE L. CAUSSE,

19 PARK PLACE, NEW YORK CITY.

BENJAMIN RIMBAUD, BULB GROWER,

Quartier du Temple, Toulon, var, France.

Cable address **Benrimbaud, Toulon.**

The largest cultures in the South of France, of **WHITE ROMAN HYACINTHS,** Narcissus Paper White grandiflora, N. Double Roman, **N. Double Von Sion,** true pure yellow, and other Daffodils. **Lilium Candidum,** the largest bulbs. Freesias, Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A. Double Rosette the earliest, etc. Prices on application.

Mention American Florist

BULBS FOR 1893 FOR FORCING.

HYACINTHS, TULIPS AND CROCUS

Mr. Lomans makes the following special offers—**Our Selection.**

Lot 1.—70,000 bulbs for $850.00
Lot 2.—14,000 bulbs for 170.00
Lot 3.—7,000 bulbs for . . . . . $ 86 00
Lot 4.—3,500 bulbs for 44.00
Lot 5.—1,750 bulbs for . . . . . $23.00.

Prices are F. O. B. Haarlem, Holland. Add 15 per cent. to above prices if delivered from New York.

Lists upon application, Address all orders to—

SEEDS H. A. DAACKE BULBS

410 W. Fourteenth St. NEW YORK.

GT. VAN WAVEREN & KRUYFF,

—Special Growers of—

DUTCH BULBS AND FLOWER ROOTS.

Mr. Gerard Kruyff has come personally to make a trip through the United States, to contract with buyers, and offers a large stock of first quality goods. Parties interested in the Bulb trade are requested to correspond. Send lists for estimates to

Gerard Kruyff,

ASHLAND HOUSE, FOURTH AVE., NEW YORK CITY.

Lily of the Valley Bulbs.

THE STAR BRAND

SPECIALLY RECOMMENDED FOR LATE FORCING.

We are now booking import orders for shipment from Hamburg in October or November.

REISS & BRADY,

280 Washington Street, New York.

TUBEROSES.

☞ We are headquarters.

	Per 100.	Per 1,000
1st size Dwarf Pearl	$1 50	$12 00
2d size "	80	6 50
1st size Tall Pearl	1 20	10 00
Gladioli, extra large, finest sorts	1 25	12 00

H. G. FAUST & CO.,

64 and 66 N. Front St., PHILADELPHIA, PA.

WOODLAWN FARMS, 1,300 ACRES.

We Sell Bulbs!

Special Prices on Application.

Weeber & Don

Seed Merchants and Growers,

114 Chambers St, NEW YORK.

Fresh From Japan.

Sound Bulbs of

Lil. Auratum, 7 to 9 inch, $9.00 per 100.
Lil. Rubrum, 7 to 9 inch, $9.00 per 100.

Import prices on first class Fall Bulbs way down.

W. W. BARNARD & CO.,

6 and 8 N. Clark St. CHICAGO.

Toronto.

The bad weather is not all in Chicago; it rained continuously here for two days this week. In consequence the meeting of the Gardeners' and Florists' Association was very sparsely attended on Tuesday evening, only just over the quorum being present.

However considerable business was done, and Mr. C. Tidy read an interesting paper which he entitled "Why florists should combine." There was an exceedingly lively discussion on the difficulties and advantages of combination, but no definite conclusion was arrived at. It seems to me that it is very doubtful if florists ever will come to any definite conclusion on this subject. It does no harm—rather good—to discuss it though, as it helps to spread new and progressive ideas of doing business among the craft, and it is to be hoped that Mr. Tidy will not lose heart at what he may possibly think his want of success in impressing his particular ideas on the members of the Association, but will keep pounding away until he sees that good is resulting from it. Mr. Ewing also read a paper on the World's Fair, the horticultural exhibits, especially that of Ontario, and his experiences there.

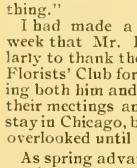
Mr. J. H. Dunlop has three new houses 18x240 feet, short slope to the south, nearly completed. After being so long accustomed to the old style they have a peculiar appearance, but I think there is no doubt but that it is the "correct thing."

I had made a note to mention last week that Mr. Ewing desired particularly to thank the officers of the Chicago Florists' Club for their courtesy in asking both him and Mr. Houston to attend their meetings and dinner during their stay in Chicago, but it was unfortunately overlooked until now.

As spring advances the plant trade is getting a hustle on and by the time this appears in print business will be pretty lively. E.

Siebrecht & Wadley,

ROSE HILL NURSERIES,



NEW ROCHELLE, N. Y.

Palms, ORCHIDS Roses,

and New Plants.

FRESH DRACAENA CANES NOW READY.

ORCHIDS.

The Finest Stock in the World.

SANDER'S, ST. ALBANS, ENGLAND.

Thirty minutes from London.

Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City.

ROSES, Leading Forcing Sorts.
PELARGONIUM, Fred Dorner, $10.00 per 100.
ALTERNANTHERA, P. Major and A. Nana.
Coleus, Centaurea, Alyssum, Verbenas, Achyranthus, $2.50 per 100.

JOSEPH HEINL, Jacksonville, Ill.

A NEW CARNATION.

FOR SALE, The entire stock of the BEAUTIFUL SEEDLING

BELLE HUNNEWELL,

Consisting of about 2,000 fine young plants.

A most vigorous and healthy variety, a wonderful cropper, and fully tested. Color orange yellow and red.

For full particulars address

JOSEPH TAILBY & SON, Wellesley, Mass.

CUTTINGS

Carnations- Lizzie McGowan, Grace Darling and Aurora.
French Canna—A fine assortment of the best varieties only at $4.50 per 100, or $35.00 per 1000.
Pansies—Small blooming plants $1.75 per 100. or $15.00 per 1,000. Magnificent strain.

Terms Cash. Correspondence Solicited.

ALBERT M. HERR, Lock Box 496, Lancaster, Pa.

Carnations All Sold

We still have some Fine Plants of

The Best Yellow Canna. NELLIE BOWDEN, 75c each. $8.00 per dozen

JOHN McGOWAN, - - Orange, N. J.

FIELD GROWN CARNATIONS.

50,000 Ready in the Fall.

W. R. SHELMIRE,

CHESTER CO., AVONDALE, PA.

Correspondence Solicited.

CARNATIONS.

A SPECIALTY.

Full stock of all the new and leading varieties. Rooted Cuttings, Young Plants, and Field Grown Plants in season. Get our prices before purchasing.

GEO. HANCOCK,
GRAND HAVEN, MICH.

Mention American Florist.

FILL UP HOUSES FOR SUMMER.

Fine young plants, potted now, will be worth many times the money by autumn.

ALL EXTRA STRONG.

PALMS.	Per 100
Latania Borbonica, 2 inch pots	$ 5.00
Cocos Plumosa, or Weddelliana, 2 inch pots	10.00
Cocos Weddelliana, 3 inch pots	20.00
Areca Baueri, 3 inch pots	10.00
Cocos Plumosa and Weddelliana, strong, from seed boxes	5.00
Latania Borbonica, from seed boxes	2.00
ORNAMENTAL FOLIAGE.	
Dracæna Terminalis, 2 inch pots	6.00
Dracæna, 20 finest sorts, 2 inch pots	10.00
Dracæna Fragrans or Amabilis, 4 in. pots	15.00
Ornamental Foliage, 25 beautiful varieties, 2 and 3 inch pots	10.00
Crotons, 20 very fine sorts, 3 inch pots	15.00
Caladiums, 20 very fine sorts, 2 inch pots	10.00
Pandanus Utilis, 4 inch pots	25.00
Musa Ensete, 4 inch pots	20.00
FERNS.	
Lomaria Gibba, 2 inch pots	6.00
Lomaria Gibba, very fine, 3 inch pots	10.00
Nephrolepis Phillipense; 3 inch pots	8.00
Market sorts, mixed, 10 sorts, 2 inch pots	5.00

JOHN H. LEY,
ANACOSTIA, D. C.

VIOLETS.

LADY H. CAMPBELL,

Strong young plants, $5.00 per hundred. Well Rooted Cuttings, $3.00 per hundred. Stock has never been diseased.

CAPE COD VIOLETS, double, hardy, $2.00 per 100.

CASH WITH ORDER.

H. HUEBNER, Groton, Mass.

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

GRACE BATTLES

and over 60 other varieties of

CARNATIONS

offered the Wholesale Trade.

My list embraces the best Standard and New kinds, including some of particular interest to growers of seedlings. Correspondence and personal inspection solicited. C. J. PENNOCK,

The Pines, Kennett Square, Chester Co., Pa.

ROOTED CUTTINGS of CARNATIONS

By the Wholesale.

Ready now. This is the best time for intending buyers to supply themselves. offer them at moderate prices. Send for Price List. Address

JOSEPH RENARD, Unionville, Chester Co., Pa.

ROOTED CUTTINGS

Of the Best Old and Most Promising new varieties of

CARNATIONS.

Write for a catalogue and send list of wants for an estimate.

J. J. Styer,
CONCORDVILLE, PA.

CARNATION CUTTINGS.

Healthy stock, well rooted, ready to ship now.
Hinze's White..... per 100, $1.25; per 1000, $ 8.00
L. L. Lamborn..... " 1.50; " 12.50
W. F. Dreer..... " 2.50;

THOMAS DeWITT,
(Successor to DeWitt Bros.) BRISTOL, PA.

MRS. THEODOSIA B. SHEPHERD,

VENTURA-BY-THE-SEA, CAL.,

GROWS PLANTS, BULBS, SEEDS AND CACTI FOR THE TRADE.

Fresh Smilax Seed, $3.50 per lb. Special rates on quantities. Calla Lilies in August.

Strong dormant roots of Poinsettias now ready. Largest size, $2 per doz.; 2nd size, $1.35 per doz.; $8 per 100, delivered.

French Cannas—Ventura, $15 per 100, delivered. Mme. Crozy, Pres. Carnot, Star of 76, Doyen Sisley, Geoffrey St. Hilaire, etc. $11 per 100. Older varieties, $6 per 100, delivered.

Freesia Bulbs, strong, July, $3.50 per 1000; medium, $2.25 per 1000. ☞ Cash with orders.

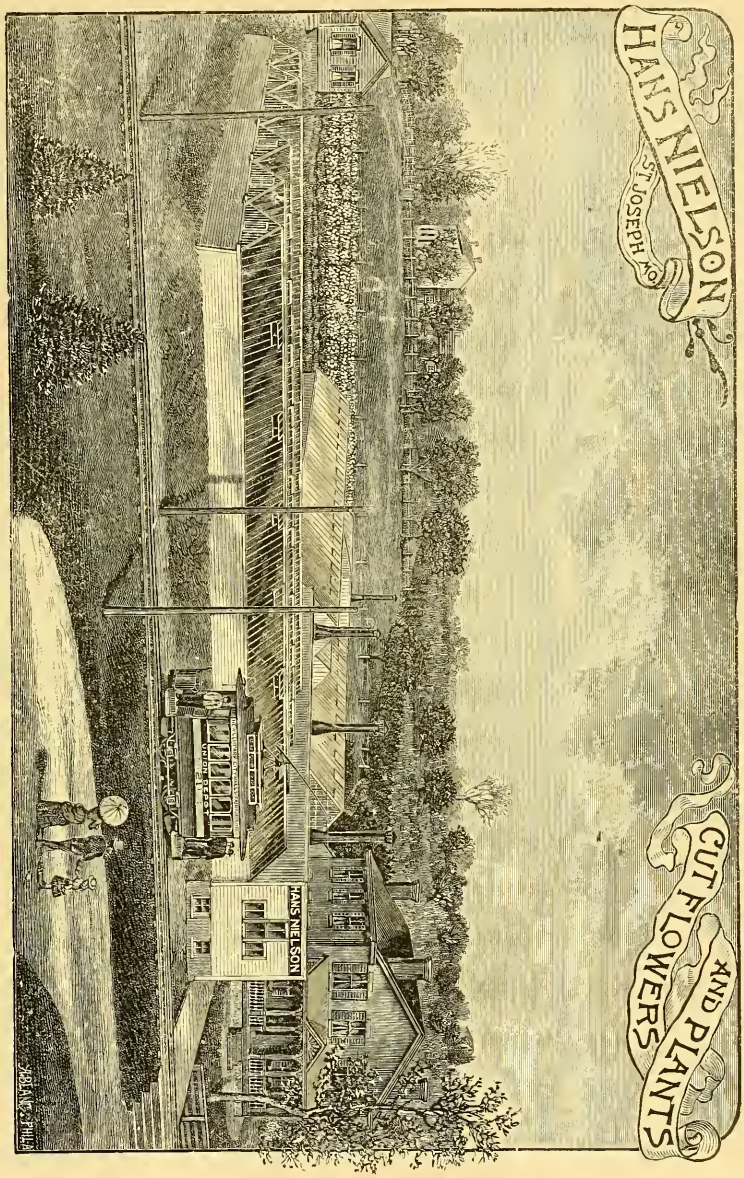
Cosmos, Cobæa Scandens, Eckford's Sweet Peas, French Cannas and other seeds supplied in large quantities. Send for retail catalogue and wholesale list.

FOR SALE OR LEASE.—A BARGAIN.

The above splendid business property with its extensive patronage, demanding increased facilities for growing cut flowers and plants in general, is offered for sale owing to poor health of owner.

For particulars address

HANS NIELSON, St. Joseph, Missouri.



Association "Flora"

BOSKOOP, HOLLAND.

Now on hand in New York:
CLEMATIS, 3 Years, per 100, $30.00
H. P. ROSES, for forcing, " 9.00
In the best variety, as Alfred Colomb, Anna de Diesbach, B. Rothschild, Fisher Holmes, Gen. Jack, La France, Mme. G. Luizet, Mme. Plantier, Magna Charta, Paul Neyron, P. C. de Rohan, Merville de Lyon, Perle des Blanches, Ulrich Brunner and other sorts. Azaleas, Rhododendrons, Spiræas, etc. We also have Palms, Dracænas, Araucarias and Bay Trees at our nurseries in Holland. Catalogue on application.

P. OUWERKERK, 206 Cambridge Ave., JERSEY CITY, N. J.

THE TOTTENHAM NURSERIES Lt'd, DEDEMSVAART, HOLLAND.

(OLD FIRM A. M. C. JONGKIND CONINCK.)

Hardy home-grown bulbs and flower roots, herbaceous plants, ferns, hydrangeas, aquatics, young fruit trees, rhododendrons, conifers, etc. for fall importation. Catalogue free on application to their sole agents.

C. C. ABEL & CO., P. O. Box 920, New York.

E. G. HILL & CO.,

Wholesale Florists,

RICHMOND, INDIANA.

Cycas Revoluta

The Largest and Best Selected Stock of Cycas Revoluta, fronds and roots cut off, true long leaved variety, now on hand.

For general Japanese and Australian stock, apply to

F. GONZALEZ & CO.,

303-312 Wayne St., SAN FRANCISCO, CAL.

☞ Send for catalogue

Buffalo.

There is little or no summer weather yet in this town and business in plants is very backward. A few store openings helped to make things lively, notably one on Main Street for a new firm of clothiers, which was handled by S. A. Anderson and was very elaborate, a canopy being built to the curbstone and covered with smilax and laurel.

There was a great demand for flowers of all kinds last week and not enough to satisfy the demand. Roses in particular were in short supply. The consequence was that the commission house of D. B. Long was besieged every morning at an early hour, by a dozen retailers all anxious to get more than their share. It's amusing to see the tall and graceful Speise, the progressive Palmer, the athletic Rebstock, and the veteran Mepsted, elbowing and chinning each other when they want the lion's share. But they have to fall back and take their turn when the small but gritty Adams appears on the scene. What he lacks in avoidupois is more than made up in nerve.

And still they come. Mr. James B. Milley is to open a retail store on William Street, one of our best streets outside of Main. Mr. Milley is blessed with two most industrious sons who have largely managed the business of late, principally wholesale. John will run the store while William B. grows the stuff, and there is no doubt about the new venture being a success.

Eastern florists who pass through Buffalo going to or returning from the World's Fair should stop off here a few hours and take a drive through our park system. It is looking its best just now; in fact it is simply charming. Flowers or no flowers it is almost matchless in this country and the writer has seen about all the principal parks and *thinks* he knows whereof he speaks. There is no Egyptian obelisk and no elaborate display of flower gardening, but the wealth of flowering shrubs and beautiful trees and natural style of landscape gardening far more than compensates for the lack, if it is a lack, of the first mentioned. W. S.

They are Going

DO YOU WANT ANY?

		Per 100
Alternantheras, 3 vars.	($25 per 1000)	$3 00
Achania malvaviscus		5 00
Agathea cœlestis		2 50
Ageratum, white and blue		3 00
Alyssum, 3 vars	($25 per 1000)	3 00
Aloysia citriodora		5 00
Balm, variegated		3 00
Centaurea gymnocarpa		3 00
Coleus, in variety	($25 per 1000)	3 00
Dahlias, large roots		8 00
Impatiens Sultani		4 00
Lobelia, blue		3 00
Mauettia Vine		3 00
" " 4-inch		10 00
Marguerite Daisy		4 00
Oxalis, pink		3 00
Passiflora, golden spotted, John Spaulding		5 00
Mexican Primrose	($25 per 1000)	3 00
Salvias		4 00
Smilax		3 00
Verbenas, healthy stock	($25 per 1000)	3 00

I. N. Kramer & Son,
CEDAR RAPIDS and MARION, IOWA.

Mme. Crozy Cannas.
From 4-inch pots, ready to flower, $15.00 per hundred, cash.
I. L. POWELL, Millbrook, New York.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

The three leading Florist Flowers:
CHRYSANTHEMUMS, CARNATIONS AND ROSES.
ALL THE NEW AND SELECTED STANDARD VARIETIES. . . .
My stock of all are as fine as can be produced at reasonable rates.
Complete list of these will be mailed to all applicants in the trade.
JOHN N. MAY, Summit, N. J.

CANNA EXPLORATEUR CRAMPBEL
Flower as large as BOUVIER; color a clear vermilion scarlet, tinted with crimson spots distributed evenly over the petals. Flower spikes large. We claim it to be the largest and most showy deep red flower of all the new Crozy kinds. **Per dozen, $6.00; per 100, $40 00.**
ALPHONSE BOUVIER and J. D. CABOS, per dozen, $4.00.
FLORENCE VAUGHAN, the sensation of the year, each, $2.50.
J. C. VAUGHAN
NEW YORK: 26 BARCLAY STREET. CHICAGO: P. O. BOX 688.

Established Orchids.
CATTLEYA TRIANÆ, fine selected stock, well established in 6 inch pots, and will produce four to eight flowers each next winter. Many of them are very choice varieties. Single plants, $2.50, twelve for $25, one hundred for $175. **CATT. GASKELLIANA,** extra well furnished plants in fine condition, and will produce in June next 6 to 10 flowers each. Single plants, $2.50, twelve for $25. **CATT. MOSSIÆ,** the finest cattleya for color and size yet introduced. Splendid plants, well furnished with flower sheaths and will produce 6 to 10 flowers each plant in May. $3 each or $30 per dozen. A large consignment of **EAST INDIAN ORCHIDS** will shortly arrive. Among them will be a grand lot of **Cypripedium Insigne,** collected in the original district from which all the choicest varieties have come. Also **Dendrobium Nobile, Dendrobium Farmerii, Dendrobium Chrysotoxum, Dendrobium Thyrsiflorum, Dendrobium Aureum, Dendrobium Densiflorum, Dendrobium Devonianum, Dendrobium Cambridgeanum** and other choice species. Particulars later.
IG. FORSTERMAN, NEWTOWN, N. Y.

HOW TO GROW CUT FLOWERS.
A PRACTICAL TREATISE ON
THE CULTIVATION OF THE ROSE,
And Other Flowering Plants for **Cut Flowers,** sent to any address upon receipt of **$2.00.** M. A. HUNT, Terre Haute, Ind.

PRIMROSE SEED
From finest strains in cultivation. Fresh and reliable.

Price per packet	$ .20
6 packets	1.00
14 packets	2.00

Sixty seeds of the single in a packet, and twenty of the double.

Single and double mixed, 12 sorts, 400 seeds,	$1.00
Per thousand seeds, assorted or mixed	2.00

Special rates in large lots.
Circulars sent on application.
Grown and for sale by
HENRY S. RUPP & SONS, Shiremanstown, Pa.

Water Hyacinth,
Prepaid, $2.00 per 100; or well packed, delivered on cars, $10.00 per 1000.
Amaryllis (Zephyranthes) **Atamasco,** first size, $5.00; second size, $4.00 per 1000.
Phyllocactus Latifrons, or Queen Cactus, $5.00 per 100; specimen plants, $20.00 per 100.
Cereus Triangularis, strong plants, $4.00 per 100.
Osmunda Regalis, or Royal Fern, from 3-inch pots, $4.00 per 100; specimen clumps for 10-inch pots, 25 cents each.
Nephrolepis Exaltata, or Sword Ferns, from open ground for potting, $1.50 per 100.
Send for our Trade List.
BRAND & WICHERS, SAN ANTONIO, FLA.

Cyclamens.

	Doz.	Hundred.
Select strains, in 3½-in pots	$1.00	$8.00
H. P. Roses. Select named kinds	1.50	10.00
Smilax, stocky, well-hardened Seedlings, per thousand,	6.00	.75

F. A. BALLER, BLOOMINGTON, ILL.

COLEUS.
Standard Sorts, $2 25 per 100; $20 per 1000.
My Specialty: Golden Bedder and Verschaffelt. $2.50 per 100; $22.50 per 1,000; 2½ inch pots; ready now. Any quantity. Cash with order.
C. F. FAIRFIELD, SPRINGFIELD, MASS.

GERANIUMS.
Fine plants and varieties, 4 inch pots, per 100, $7 50.
Tuberous Begonias, per 100, $3.00 and $2.50. Should be ordered now.
BRAUER & RICHTER, McCONNELSVILLE, OHIO.

NEW BEDDING BEGONIA
THURSTONII.
Strong plants, $1.00 per dozen; $6.00 per hundred.
J. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

Chrysanthemums.

The plants are in pink of condition.

J. N. Girard, not less than 5 plants		4c
V. H. Hallock,	"	4c
Mrs. Langtry,	"	4c
Mrs. Humfrey,	"	4c
W. W. Coles,	"	4c
Louis Boehmer,	"	4c
Mrs. F. Thompson,	"	4c
Elmer D. Smith,	"	4c
Frank Thompson,	"	4c
Mrs. J. Westcott,	"	4c
Alcazar,	"	4c
E. G. Hill,	"	4c
La Fortune,	"	4c
Minnie Wanamaker,	"	5c
Waban,	"	5c
Potter Palmer,	"	6c
J. C. Vaughan,	"	6c
Annie Manda,	"	6c
E. D. Adams,	"	6c
Mrs. W. T. Kimball,	"	6c
E. Asmus,	"	6c
Gov. Fifer,	"	6c
Roslyn,	"	8c
Spartel,	"	8c

S. PICKELMAN,
352 William St., BUFFALO, N. Y.

"CHRYS-COLA"

Rooted Coleus,

$5.00 PER 1000.

Chapmani, Chicago Bedder, Verschaffeltii, Golden Verschaffeltii, Hero, Yeddo, Firebrand, Fire Crest, Golden Bedder, J. Goode.

Will have plants from 2½-in. pots of above vars. ready about June 1, at $1.75 per 100; $15 per 1000.

Fuchsias in assortment, immediate delivery, 2¼-inch pots, $2 per 100; $18 per 1000.

S. B FIELD, ROSELLE, N. J.

VERBENAS.

In Bud and Bloom. Per 100 P. 1000

Mammoth and general collection, choice assortment, all colors, fine bushy plants....$ 3.00 $25.00

ROSES—Fine healthy stock.

Perles, Mermets, The Bride, Sunset, Papa Gontier, Niphetos, Bon stiene, La France, Souv. d'un Ami, Duchess of Albany, Mad. Cusin, Mad. de Watteville 5.00 45.00

Hybrid Perpetual Roses in bud and bloom, from 5 inch pots, strong plants. . 25.00

Tea Roses, in bud and bloom, from 4 and 5 inch pots, strong. ..... $10.00 and 15.00

Geraniums, double and single, fine assortment of varieties from 2½ inch pots..... 4.00 35.00

From 3½ inch pots..... 8.00

Heliotrope, strong bushy plants, 3½ in. pots 6.00

Vinca, variegated, strong, 1 year old, bushy 10.00

Lots of other Fine Stock.

Send for new list.

WOOD BROTHERS,
Fishkill, N. Y.

PLANTS.

Alternanthera, Versicolor, Tricolor and Aurea Nana	per 100	$2.50
Alternanthera Paronychiodes.	"	3.00
Coleus, best old and new ..... (200 for $5.00)	"	3.00
Fuchsia Trailing Queen.....	per doz.	.50
Begonia assorted	per 100	$4.00
Mexican Primroses, 3 varieties.....	"	3.00
Fuchsia, best varieties..... ...	"	3.00
" Storm King and Phenomenal.....	"	4.00
Echeveria Glauca.....	"	3 & 4.00
" Extensa Globosa, for centers, plants six inches across,.....	each.	.25

Price List on Application

ROBT. S. BROWN & SONS,
Box 99, Kansas City, Mo.

CHRYSANTHEMUMS.

2½ inch, $4 per 100.

SMILAX—1st class, from 2½ inch pots, $2.50 per 100; $20.00 per 1,000. Samples free.

Add-888 **J. G. Burrow,**
FISHKILL, N. Y.

Mention the American Florist when writing to advertisers on this page.

Begonia Semperflorens Rosea

BOOM YOUR BUSINESS. IT GETS THERE.

BEGONIA SEMPERFLORENS ROSEA will do it. Sells at sight. It is not only the best Begonia by far, but the best all the year round **market plant** we cultivate to-day. It blooms to **perfection** all the **year round.** Plants of it unsold at Thanksgiving will be in good condition at Christmas, and better still at Easter. This is simply a fact. It is of vigorous growth and compact habit, of a pleasing **rosy pink color.** It is the best flowering plant we have had for all kinds of Decorations; equally desirable for pots or cut blooms. We have sold more of these plants in bloom since October last than all other plants put together, supplying Syracuse Florists alone about Six Hundred (600) large plants for their retail trade.

It is a splendid plant for bedding purposes, vases, boxes, baskets, or for general decoration and cut flowers; sells readily at fancy prices. **TRY IT. IT GETS THERE** I offer a limited supply of extra strong well branched, well established plants, now ready.

		Per 100.
2½ in. pots, once or twice stopped		$ 6 00
2¾ " " "		8 00
4 " in bloom if required		12 00
5 " extra fine plants		16 00
6 " specimen plants		25 00

☞SAMPLES of the 5 sizes sent by Express, or of the first 3 sizes by Mail, on receipt of **one dollar.** No order accepted for less than $1.00.

☞**50** plants of any size at Hundred rates. **Cash with ORDER.**

Rooted Cuttings, once stopped back, $3.00 per 100. Rooted Cuttings, selected extra, $4.00 per 100. Plants can be sent by freight safely 500 to 1000 miles.

Strong Rooted Cuttings, once stopped back, will make 6-inch stock by October 1st. Sent by Express at $3.00 per 100; Mail, $4.00. Large stock can be shaken out and sent by Express safely 6 days' journey; by Freight in open boxes, 5 to 600 miles.

Order QUICK. This advertisement will not appear again.

CASH WITH THE ORDER. SATISFACTION GUARANTEED.

J. ELLETSON, Floral Nurseries, AUBURN, N. Y.

Hydrangea Otaksa,

WITH ONE TO THREE FINE HEADS,

$35 00 PER 100.

John Irvine Co.,

BAY CITY, MICH.

Echeveria Secunda Glauca.

Extra fine plants, $4.00 per 100; $3.00 per 100 cash.

Schubertia Grandiflora.

A magnificent summer climber, with large waxy white fragrant flowers, $1.50 per dozen; $10.00 per 100 cash.

Papyrus Antiquorum.

(Egyptian Paper Plant). Strong plants, 2½-inch pots, $1.50 per doz.; $10 per 100 cash.

Canna Alphonse Bouvier.

The Novelty of the Season, and J. D. Cabos, $5 per dozen cash.

Sanchezia Nobilis Variegata.

Grand new bedding plant. Strong plants, 4-inch pots, $2 per dozen cash.

WILLIAM TRICKER, Dongan Hills, S. I., New York.

PANSIES

from flats, showing flower, fine strain, $1.00 per 100; $7.50 per 1000.
Achillea "The Pearl," from flats, $2.00 per 100.
Rooted Cuttings Evergreens and Shrubs, $2 to $4 per 100.

ROGERS NURSERIES, Moorestown, N. J.

TRY **DREER'S GARDEN SEEDS,** Plants, Bulbs & Requisites. They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.

HENRY A. DREER,
Philadelphia, Pa.

P. SEBIRE & SONS,
Nurserymen, USSY, Calvados, FRANCE.

A general assortment of **Fruit Tree Stocks,** such as **Apple, Pear, Myrobolan Plum, Mahaleb and Mazzard Cherry, Angers Quince, Small Evergreens, Forest Trees, Ornamental Shrubs, Roses, etc.** The largest stock in the country. Prices very low. Packing secured. Catalogue free. Send for quotations before placing your order elsewhere. Agents for U. S. America and Canada.

C. C. ABEL & CO., P. O. Box 920, New York.

St. Louis.

As the season advances the increased heat begins to have its effect upon the market. The stuff coming in is as a rule smaller, and in increased quantities. Owing also to the lessened demand prices have about reached the summer figure, running all the way from 3 to 6 cents for the teas; Beauties of course being higher. Decoration Day is looked forward to, it being expected to call for a considerable quantity of stuff. The prevailing prices however will scarcely be affected. Cape jasmine is here in quantity from the south, although not in the same profusion that violets were earlier in the season.

At present the bedding and plant trade is in full swing and the houses are commencing to show considerable vacant space. It is hoped it will continue for some time yet.

The list of premiums prepared and approved by the Club, for which the $500 donated by the Shaw Estate is to be offered, have been submitted to the directors and have been approved and accepted by them. The advance lists of the prizes offered by the club at the coming fall show are in the hands of the printer, and in a few days will be ready for distribution. It is expected that the premiums offered will surely draw a good show together.

On Friday evening, the 19th, fourteen members met and organized the St. Louis Florists' Bowling Club, electing as officers: Mr. Fred Ostertag, president; Mr. William Ellison, secretary; and Mr. John Young, treasurer. The committee appointed to formulate constitution and by laws submitted its report, which was adopted. The members then adjourned to the alleys where a lively time was had until eleven o'clock. The best scores made were 168, 151, 143, 142. Taking into consideration the fact of this being the first meeting, and there being but one ball with finger holes, the showing is not as bad as might have been expected.

Some of the growers here have been complaining of an insect that has been playing havoc with the roses. Individually it does not amount to very much, but when they appear it is in such quantities that it takes them but little time to disfigure a crop of buds. The worst part of it is however that nothing has as yet been found that makes the slightest impression upon them, and it is hard to see the way things are going and be able to do nothing to counteract the evil.

R. F. T.

DO YOU WANT a list of the leading park superintendents of America? You will find such a list in our trade directory and reference book.

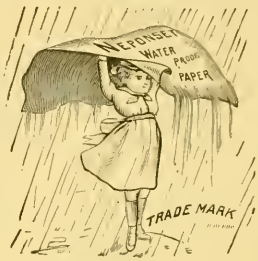
THE AMERICAN FLORIST and *Gardening* together to one address for $1.75. Send orders to the American Florist Co.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.
JOHN G. ESLER, See'y F. H. A., Saddle River, N. J.

GLASS. ROCK BOTTOM PRICES. Send for Estimate. Satisfaction Guaranteed.
RUBBID GLASS CO.,
65 Warren St., and 46, 48 & 50 College Place,
New York City.

NEPONSET FLOWER POTS

of Waterproof Paper, light, durable, unbreakable and cheap.



Tomato Growers have used them with success and proved their appreciation by repeated orders.
Cabbage Growers have tried them and duplicated their orders.
Market Growers of Verbenas, Alyssum, Coleus and other plants, which do not shun moisture, have used them extensively in repeated seasons.
Recommended for light and safe packing of tender and valuable plants, for the marketing of Ferns, Dutch Bulbs, Lily of the valley and the like.
Cost about 40 per cent less than earthen pots, and weight considerably lighter, thus saving in first cost and freight.

For Price List and further particulars address

Wholesale Agents:
AUGUST ROLKER & SONS, Station E, New York.
R. & J. FARQUHAR, - - - - Boston, Mass.

Who furnish samples, by mail, postpaid, on receipt of

	10 cts.	11 cts.	14 cts.	17 cts.	22 cts.	40 cts.	60 cts.
For 1 dozen	2¼-in.	2½-in.	3-in.	3½-in.	4-in.	5-in.	6-inch pots.

F. W. BIRD & SONS, Sole Manufacturers, EAST WALPOLE, MASS.

GOODYEAR RUBBER CO.

ALL KINDS RUBBER GOODS.

We make a SPECIALTY in GARDEN HOSE, in both Rubber and Cotton.

A GREAT VARIETY OF HOSE REELS, SPRAY PIPES, SPRINKLERS, ETC.

141 Lake Street, CHICAGO.

Pat. 1882, '85, '86, '88, '90, '91.

FOR WATER, AIR, STEAM, ACIDS, OILS, LIQUORS, GAS, SUCTION,
And for any and every purpose for which a hose can be applied.
Sizes, ½-inch to 42 inches diameter.
The making, vending or use of any Serviceable Armored Wire Bound Hose not of our manufacture is an infringement on one or more of our Patents. The rights secured to us render each individual dealer or user responsible for such unlawful use with all the consequences thereof. For prices and discounts address WATERBURY RUBBER CO., Sole Mf'rs and Owners of all the *Sphincter Grip Armored Hose Patents*, 49 Warren Street, New York.
J. C. VAUGHAN, Agent, CHICAGO.

W. C. KRICK'S

PATENT

Florists' Letters, Etc.

Highest Award wherever exhibited.

These Letters are made of the best immortelles, wired on wood or metal frames having holes drilled in them to insert toothpicks, by which to fasten them in the design. All infringements prosecuted.

2-inch Letters, $3 00 per 100.
Postage, 15c. per 100.

Before purchasing send for free sample and Catalogue and compare with any other letter in the market.

W. C. KRICK, 1287 Broadway, BROOKLYN, N. Y.

Agents:—J. C. VAUGHAN, Chicago, Ill.; H. BAYERSDORFER & Co., Phila., Pa.; N. STEFFENS, N. Y.; AUG. ROLKER & SONS, N. Y.; ED. S. SCHMID, Washington, D. C.; JAMES VICK'S SONS, Rochester N. Y.; T. W. WOOD & SONS, Richmond, Va.; J. A. SIMMERS, Toronto, Ont.

BOSTON FLORIST LETTER CO.,

13 Green Street, BOSTON, MASS.

Address all correspondence to 1 Music Hall Place.

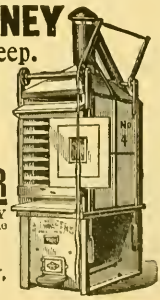
Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1½-inch and 2-inch, $2 00 per 100. Patent fastener with each letter.

With orders for 500 letters we give away a nicely stained and varnished box. See cut in next week's American Florist.

Our letter is handled by all the wholesalers in Boston.
AGENTS: Marschnetz & Co., 25 N. 4th St., Philadelphia, Pa.; A. Rolker & Sons, New York; F. E. McAllister, 22 Dey St., N. Y.; E. Kaufman, Philadelphia; H. Bayersdorfer & Co., Philadelphia, Pa.; A. D. Perry & Co., 33 Warren St., Syracuse, N. Y.; A. C. Kendal, 115 Ontario St., Cleveland, O.; E. H. Hunt, 79 Lake St., Chicago; Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.; H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O.; T. W. Wood & Sons, 6th and Marshall Sts., Richmond, Va.; Jas. Vick's Sons, Rochester, N. Y.; Dan'l B. Long, Buffalo, N. Y.; C. A. Knehn, St. Louis.
J. A. Simmers, Toronto, Ont., Agt. for Canada.

MAKE MONEY While You Sleep.



STAHL'S EXCELSIOR FRUIT DRIER

Evaporates Fruit DAY and NIGHT. Catalogue free upon application.
Address
WILLIAM STAHL EVAPORATOR COMP'Y, QUINCY, ILL.

LITTLE'S ANTIPEST.

— A —

Valuable Discovery of the 19th Century.

SILVER MEDAL AWARDED

— BY THE —

CALIFORNIA STATE FAIR OF 1890.

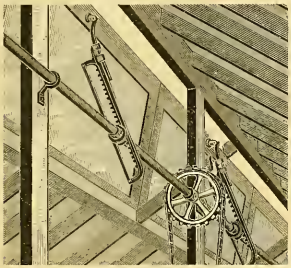
This preparation is a sure destroyer of the **Scale, Wooly Aphis** and **Insect Pests** of any and all descriptions. It may be as freely used in the conservatory, garden and greenhouse as in the orchard or vineyard. It is non-poisonous and harmless to vegetation when diluted and used according to directions. It mixes instantly with cold water in any proportion. It is **Safe, Sure** and **Cheap.** No fruit grower or florist should be without it.

Send for Circulars and Price List.

R. W. CARMAN, General Agent,
291 AMITY STREET,
FLUSHING, Queens, Co., N. Y.

SEE HERE BROTHER FLORIST!

Arn't you tired going through your houses two or three times a day year after year and lifting your ventilating sash one at a time and propping them up with sticks or pots, with a chance of having sash blown off and broken glass to pay for? If you are



We have got just the thing you need, the **Newest** and **Best** thing out. "The New Departure" for **about half** the cost of the old style. Send for Descriptive Catalogue to

J. D. CARMODY, Evansville, Ind.

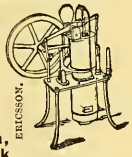
WATER

For Your GREEN HOUSE, ROSE HOUSE, NURSERY,

Conservatory, Lawn, House, Garden, Stock or any other purpose.

Send for Illustrated Catalogue OF THE

DE LAMATER-RIDER AND DE LAMATER-ERICSSON PUMPING ENGINE.



HOT-AIR PUMPING ENGINE.

Their operation is so simple and safe that a child can run them. They will pump water from shallow streams or any kind of well. They can be arranged for any kind of fuel. Capacity 1,500 to 30,000 gallons of water a day, according to size.

The De Lamater Iron Works,
87 South Fifth Avenue,
NEW YORK, N. Y.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

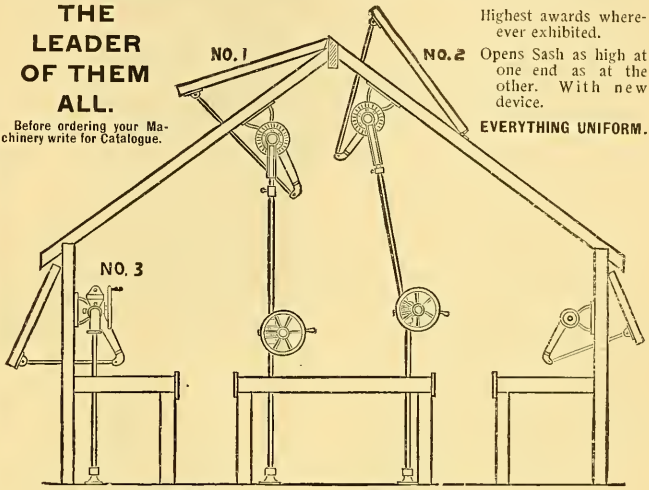
Clear Cypress, from bottom gutter up is my specialty.

Lyman Felheim, ERIE, PA.

STANDARD VENTILATING MACHINERY,

THE LEADER OF THEM ALL.

Before ordering your Machinery write for Catalogue.



Highest awards wherever exhibited.

Opens Sash as high at one end as at the other. With new device.

EVERYTHING UNIFORM.

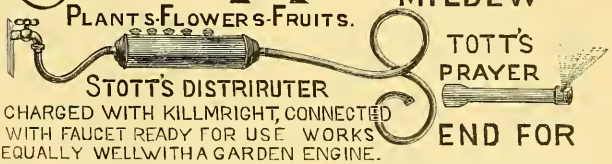
E. HIPPARD, YOUNGSTOWN, OHIO.

Mention American Florist.

STOTT'S KILLMRIGHT

SYSTEM OF SPRAYING SAVES PLANTS-FLOWERS-FRUITS.

KILLS, INSECTS AND MILDEW



STOTT'S DISTRIBUTER CHARGED WITH KILLMRIGHT, CONNECTED WITH FAUCET READY FOR USE WORKS EQUALLY WELL WITH A GARDEN ENGINE.

TOTT'S PRAYER

STOTT'S SYRINGE

CELL "A" CONTAINS THE KILLMRIGHT

SEND FOR CIRCULAR AND TESTIMONIALS.

STOTT GARDEN IMPLEMENT COMPANY
136 LIBERTY ST. NEW YORK.

GET THE STATE STRAIGHT!

Needed by every Florist, Market Gardener, owner of Lawn, owner of Grass Plat and Flower Bed, in fact, by every one who has a faucet and hose. The Union Hose Connection (patent applied for) for applying manure, fungicides and insecticides to plants. Feed your plants, fertilize your lawns by using liquid manure. A durable device, simple, scientific and practical. No bad odor, no ugly appearance, healthy plants, vivid lawns. Sent by mail prepaid for $2.50. Send for circular. Address **Hose Connection Co.**, Kingston, Rhode Island. Only 32 Kingstons in the U. S. **Get the State Straight.**

Mention American Florist.

CUTS!

Wood Engraving, Zinc Etching, Half-Tone, Wax Engraving, Photo-Engraving, Designing.

MANZ & CO., ENGRAVERS.
183 Monroe Street, CHICAGO.

THE PERFECT DRAINAGE

BENCH TILE

For circulars, etc., address

W. P. Wight, Upland Green Houses,
Send your business card. MADISON, N. J.

Indinapolis.

The regular monthly meeting of the Indianapolis Florists' Club was unusually well attended. Three new members were elected. The committee on the revision of constitution and by-laws reported, and it was decided to call an extra meeting to adopt the same after due deliberation on each section. The committee on G. A. R. convention flower beds reported favorable progress, and it seems likely that sufficient money can be had to make a suitable display of badges and other flower beds. A standing reward of $10 was voted for the arrest and conviction of plant and flower thieves. These fellows are generally news boys. They have done a great deal of harm in destroying pansy beds and vases. Several papers of interest were read and discussed. A committee was appointed to look around and inquire of those florists and gardeners that attend market, how a more suitable location can be had for the flower market.

At the meeting for adoption of constitution and by-laws a few days later, a section was inserted that a life membership on the payment of $25 should be added. After several other minor changes the whole was adopted and ordered printed.

The remarkable cold weather has hurt the market trade and is retarding the planting out. A rush of course will follow, and most of the work will be crowded into a few days.

Mrs. Fred Dorner, of Lafayette, has been on a visit to this city for the past two weeks. In her absence from home, a great hail storm damaged their greenhouses and stock, as well as skylights and windows of other citizens.

Local seed houses and a big dry goods house have been knifing each other on bulbs and seeds. Tuberose bulbs (good ones) sold at 5 and 6 cents a dozen. Flower seeds free of charge. Think of a dry goods store selling dormant roses, thousands of them, at a cheap price, some good, but most of them forever dormant.

Hollanders are still coming around on the fly. Where do they all come from?

Cut flowers are plentiful, with little demand. Bedding stuff is getting scarce, especially foliage plants.

Outdoor bulbous plants have done remarkably well this spring and have certainly been a delight to many. W. B.

EVANS' IMPROVED
CHALLENGE VENTILATING APPARATUS
Write for Illustrated Catalogue.
QUAKER CITY MACHINE WORKS, Richmond, Ind.

FLORISTS' HOSE,
Made by E. W. Holt, member of the Society of American Florists.
Goodyear Rubber Store,
2 W. 14TH ST. NEW YORK.

Lawn Vases.
THE LARGEST IN THE MARKET FOR THE MONEY.
17x30-inch ....price $1.00.
17x31-inch, with base, price $1.75.
20x22-inch ....price $1.50.
20x22-inch, with base, price $2.25.
Send for our price list of Standard Flower Pots, Plain and Fancy Vases, etc., etc. Terms cash f. o. b.
HILFINGER BROS. POTTERY, Ft. Edward, N. Y.

Mention American Florist.

THE "LOCKLAND" Sash Bars ✳ ✳ ✳
ARE ALWAYS SATISFACTORY.
This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.
GUTTER MATERIAL, RIDGES, SASH, ETC.
The finest CLEAR CYPRESS used.
Write for circulars and estimates. . . .
LOCKLAND LUMBER CO.
. . . . . Lockland, O.

"Standard" Flower Pots.
As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address
The Whilldin Pottery Company,
BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

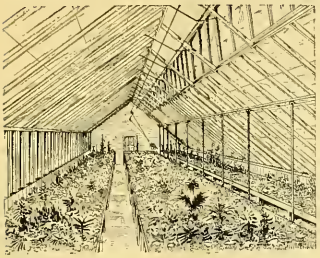
STANDARD FLOWER POTS.
Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.
A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.
We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.
SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY
Manufacturing the
ELVERSON, SHERWOOD & BARKER
STANDARD FLOWER POTS.
Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bird Pots, etc.
ADDRESS PITTSBURGH CLAY MF'G CO., New Brighton, Pa.

H. M. HOOKER COMPANY,
57 and 59 W. Randolph Street, CHICAGO,
NATURAL GAS MADE GLASS
FOR GREENHOUSES.
Write for latest prices.

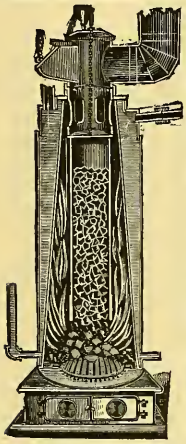
THE CHAMPION



Automatic Ventilator.

The cheapest, easiest to operate, and by far the best machine in the market. Don't buy a Ventilator until you have seen my illustrated descriptive circular, which will be sent you free, giving prices, etc. Also Champion Soil Pulverizer and Sifter.

Address, **E. E. WOLF,**
Box 114. SPRINGFIELD, O.



THE WILKS HEATER,

FOR HEATING
GREENHOUSES, STORES, DWELLINGS, ETC.

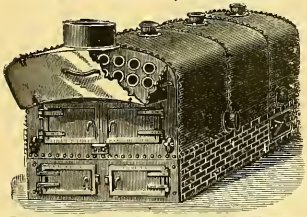
Manufactured *THE S. WILKS MF'G CO.* 123 S. Clinton St., CHICAGO, ILL.

☞ SEND FOR CATALOGUE.

KROESCHELL BROS.

IMPROVED
Greenhouse ×× Boiler,

41 to 55 Erie St., CHICAGO.



Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around front, sides and back). Write for information.

YOU CAN SAVE MONEY BY PURCHASING, AND GLASS BY USING

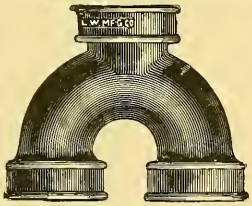
HAMILTON'S PATENT SASH LIFTER.

"It works like a charm." So say those who use it. Send us 50 cents for one sample and you will say so too.

BAY STATE HARDWARE CO.
272 Freeport Street, BOSTON, MASS.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

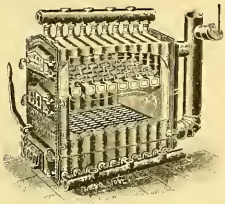
GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

L. WOLFF MFG. CO., 93 to 117 W. Lake Street, CHICAGO.

WRITE FOR ILLUSTRATED CIRCULAR.



ALL FLORISTS ARE INTERESTED IN

HEATING,

And Know a Good Boiler when they see one.

Royal Heaters.

—:o:—

We will be pleased to send you our Catalogues

HOT-WATER, STEAM.

HART & GROUSE,
UTICA, N. Y.

FRENCH GLASS For CONSERVATORIES, ROSE HOUSES, Etc. Etc.

VANHORNE, GRIFFEN & CO.,

Importers of PLATE and WINDOW GLASS. Manufacturers of BENT GLASS and FRENCH MIRRORS.

131-133-135-137 FRANKLIN STREET, NEW YORK.

Note—Imported Glass is used in the best grade of Greenhouse building.

STANDARD HOSE MENDER.

The only Mender using ordinary galvanized wire No. 14, instead of expensive bands. Any person can handle it with perfect ease. Thousands in use and all testify to its Wonderful Merits.

Sample Box, by Mail, 50 cts.

E. HIPPARD, Youngstown, Ohio.

GURNEY Hot-Water Heaters FOR Greenhouses.

Send for a copy of our book "How best to heat our houses."

GURNEY HOT-WATER HEATER CO.
163 FRANKLIN ST., BOSTON

New York City: Johnson & Co., 71 John St. Phila.: J. C. F. Trachsel, 246 Arch St. Chicago: Rice & Whitacre, 47 South Canal St.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS •
Greenhouse Material,

LOUISVILLE, KY.

IMPROVED GLAZING.

Zinc Joints for butting glass without laps. No leakage. No sliding of glass. Practically air tight. Keeps out cold winds, thereby saving fuel. No laps, saves enough glass to pay for the zincs. No breakage of glass on account of frost or ice. Some of the largest growers in the country are using "Gasser's Patent Zinc Joints" with entire satisfaction. Write for sample and price list.

J. M. GASSER, FLORIST,
101 Euclid Ave., CLEVELAND, O.

Index to Advertisers.

Abel C C & Co....1113 1115
Adv. Rates, etc 1108
Anchorage Rose Co. ..1106
Baller F A. 1114
Barnard W W & Co...1117
Bay State Hdw Co....1119
Bayersdorfer H & Co .1106
Berger H H & Co.....1110
Bird F W & Son 1116
Bonsall Jas E & Son ..1114
Boston Letter Co 1106
Brand & Wichers.....1114
Bruner & Richter.....1114
Brown R S & Son.....1115
Burns & Raynor.....1109
Burrow J G..... 1108 1115
Burton John..... 1106 1107
Carman R W.... ... 1116
Carmody J D..... ..1117
Causse A L 1117
Chaudlee Geo F 1108
Chicago Cut Flower Ex 1108
Cook John.... ... .1107
Corbrey T J 1108 1115
Currey G W & Co ... 1108
Daacke H A. 1111
De Lamater Iron Wks 1117
De Witt Thomas 1112
Dreer H A.....1115
Elletson J.....1115
Elliott W H.....1108
Ellison Wm.....1109
Fairfield C F 1114
Faust H G & Co 1111
Felheim Lyman 1117
Field S B 1115
Forstermann I. 1114
Freeman Lizzie.....1110
Gasser J M 1117
Gonzalez & Co 1113
Goodyear Rubber Co .1116
Goodyear Rubber Store 1118
Gurney Heater Co ...1119
Hall Ass'n.....1116
Hancock Geo 1112
Hansen Christ 1107
Hart James.....1109
Hart Michael A 1109
Hart & Crouse.....1119
Hartford H E.....1112
Heinl Jos.....1112
Henderson John Co...1107
Herr Albert M.....1112
Hews A H & Co 1118
Hillinger Bros.....1118
Hill E G & Co.. 1113
Hippard E 1117 1119
Hitchings & Co.....1120
Hooker H M Co. 1118
Horan Edw C 1109
Hose Connection Co..1117
Houston R J.....1105
Huckins E 1105
Huebner H 1112
Halsebosch Bros 1110
Hunt E H.....1109
Hunt M A. 1107 1114
Hunter & Pardy 1109
Irvine John Co 1115
Jackson A T..... ..1106
Kaufmann Frost & Co 1106
Kemble Floral Co 1109
Kennicott Bros..... 1109
Koffman F. 1108
Kramer J N & Son.....1114
Krick W C. 1109
Kroeschell Bros ..1119
Kuehn C A..... 1109
La Roche & Stahl.... 1108
Letellier & Son..... 1111
Ley John H 1112
Lockland Lumber Co..1118
Lombard R T 1112
Long Dan'l B. 1109
Lonsdale Edwin. 1107
McCarthy N F & Co...
.....1105 1109
McCrea & Cole 1107
McFarland J H.....1107
McFarland J H Co....1109
McGowan John. 1114
Manz J & Co 1117
Marschuetz & Co.....1106
May John N.. 1114
Meyer John C & Co. ..1106
Michel Plant & Bulb Co 1110
Milliang Bros..... 1109
Moffatt G J..... 1110
Moninger Joe C 1120
Moon Samuel C.....1110
Moore Frank L. 1107
Nanz & Neuner.... ... 1107
National Plant Co 1106
Nelson Hans 1113
Niles Centre Floral Co 1109
Olson M 1109
Ouwerkerk P.....1113
Peck & Sutherland....1109
Pennock C J 1112
Pennock Sam'l S 1108
Pickelman S.. 1115
Pierson F R Co. 1110
Pittsburg Clay Mfg Co 1118
Powell I L.. 1114
Prince A G & Co 1109
Quaker City Mach Co. 1118
Randall A L. 1109
Reck John 1110
Reed Glass Co.....1116
Reed & Keller.... 1116
Reiss & Brady.....1111
Renard Joseph.....1112
Rimbaud Benj..... .. 1111
Roberts D H.....1120
Rochrs Theo.....1109
Rogers Nurseries.....1115
Rolker A & Sons 1106
Rupp H S & Son. 1114
Russell S L.....1106
Sander & Co.. 1112
Schulz Jacob.....1107
Sebire P & Sons. 1115
Segers Bros.. 1111
Segers & Co 1110
Shelmire W B.....1112
Shepherd Mrs T B ...1112
Sheridan W F.....1109
Siebrecht & Wadley...1112
Simons R E.....1105
Stelle, Doppfel & Co...1118
Situations, wants.....1105
Smith C A Floral Co..1109
Smith & Webster.....1120
Spooner Wm H. 1106
Stahl Wm 1116
Stott Garden imp Co..1117
Struck J N & Bro.....1119
Styer J J 1112
Sunderbruch H L 1109
Tailby Joseph & Son..1112
Tesmer Julius & Co...1108
Texas Seed & Floral Co.....1108
Tricker Wm.....1115
Tottenham Nurseries.1113
Vander Schoot R & Son. 1110
Van Horne Griffen & Co 1119
Van Waveren & Kruyff.. 1114
Vaughan J C.....1114
Vaseburg Rubber Co 1116
Weeber & Don.....1111
Welch Bros.....1109
Whitldin Pot Co ... .1118
Wicht W P.....1117
Wilks S Mfg Co.....1119
Winter N D 1105
Wisconsin Flower Ex.1110
Wolf F E 1119
Wolff L Mfg Co.....1119
Wood Bros.....1115

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

CYPRESS GREEN HOUSE MATERIAL

CLEAR CYPRESS SASH BARS

HOT BED AND VENTILATING SASH

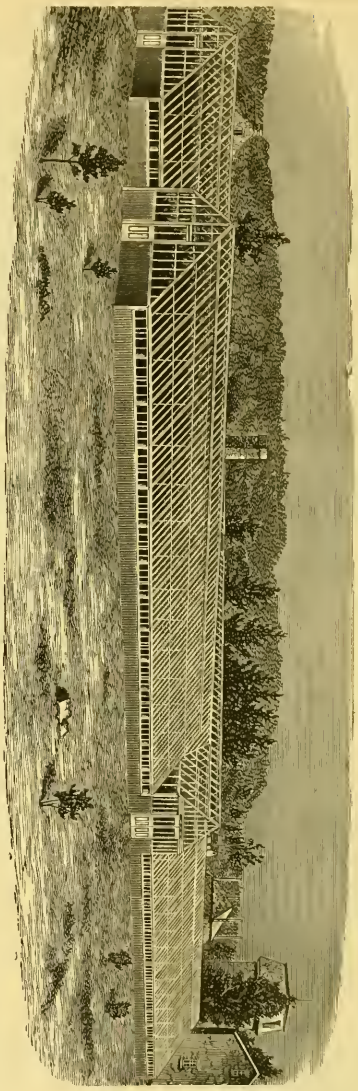
JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

HITCHINGS & CO.

ESTABLISHED 1844.

GREENHOUSE HEATING AND VENTILATING,

HORTICULTURAL ARCHITECTURE AND BUILDING.



COMMERCIAL ROSE AND GREENHOUSES, CONSERVATORIES, PALM HOUSES, ETC., CONSTRUCTED WITH POSTS, RAFTERS, PURLINS, GUTTERS, SILLS, COLUMNS AND BRACKETS, ALL OF IRON; AND GLAZING BARS. VENTILATING SASH AND SIDING OF WOOD. ERECTED COMPLETE, OR THE STRUCTURAL IRON WORK SHIPPED READY FOR ERECTION WITH PLANS, DETAILS AND FULL INSTRUCTIONS TO ENABLE LOCAL MECHANICS TO COMPLETE THE SAME. ——) IRON BENCH FRAMES FOR SLATE OR WOOD TOPS. (——

SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUES.

HITCHINGS & CO., 233 Mercer Street, NEW YORK.

SMITH & WEBSTER,

MAKERS OF

GREENHOUSE PIPE

FOR HOT WATER AND STEAM,

193 Lake Street, - CHICAGO, ILL.

D. H. ROBERTS,

159 & 161 S. Fifth Ave., NEW YORK,

NATURAL GAS MADE GLASS

for ROSE HOUSES, CONSERVATORIES, Etc., Etc.

Our Glass received the Highest Award at the Boston Convention of the S. A. F.

THE AMERICAN FLORIST

A WEEKLY JOURNAL FOR THE TRADE

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, JUNE 1, 1893.** **No. 261**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company.
Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,

322 Dearborn Street, CHICAGO.

Eastern Office: 67 Bromfield St., Boston.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass. secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis, Mo., August 9 to 12, 1893.

CONTENTS.

Introduction to study of plant life (concluded).1121
The World's Fair contest in floral arrangement 1122
The lagoon at the World's Fair (illus) . . 1123
Scale for judging excellence in design . . . 1123
The Pittsburg hailstorm 1124
Conservatory at Lincoln Park (illus) . . . 1125
The World's Fair 1125
Carnations—Seasonable hints. 1126
Philadelphia's loss . . . 1126
South pansy bed at the World's Fair . 1127
Boston 1127
Philadelphia 1128
New York 1128
Chicago 1128
Baltimore 1129
Denver 1129
Catalogues received 1129
Floral arrangement 1132
The seed trade 1134
—Turnip seed 1134
Change in marine law 1134
St. Louis 1136
Low prices in Cleveland 1138
From the journeyman's standpoint 1140
Cincinnati 1142

THE PROGRAMME of the World's Horticultural Congress is being made up and will soon be issued. All who desire a copy should address Secretary World's Congress Auxiliary, Home Insurance Building, Chicago, or J. C. Vaughan, Chairman Local Committee, Chicago. The session begins August 16, continuing four days. It is hoped all horticulturists of the world will so arrange their visit to the Fair as to be present at this date. Florists, seedsmen and others will hold separate sessions.

MR. JOHN BOYD THACHER, whose system of judging exhibits at the World's Fair has excited such serious criticism from exhibitors, has at last made concessions that will prove satisfactory to all concerned. Exhibitors who request it may now have their exhibits passed upon by a jury instead of by a single judge, as per Mr. Thacher's original plan.

YOU CAN'T AFFORD to do business without a copy of our trade directory and reference book.

An Elementary Introduction to the Study of Plant Life.

BY FRANCIS CANNING.

[*Read before the May meeting of the Penna. Hort. Society.*]

[CONCLUDED FROM LAST ISSUE.]

CHEMISTRY OF PLANT LIFE.

Plants are made up of about fourteen simple elements, organic and inorganic. The organic elements are so called because they are found in all things, whether plants or animals, in certain combinations peculiar to living things, and forming compounds that are only found in living things.

The inorganic elements are so called because they are not always found in living things, but many of them are generally present in the bodies of plants and animals in combination with the organic elements. They are chiefly mineral in character. Of the four organic elements, which are always present in plants and which are called oxygen, carbon, nitrogen and hydrogen, make up by far the larger proportion of living plants, forming from 90 to 99 per cent of their substance. The remaining very small proportion, namely, from 1 to 10 per cent, being made up of inorganic elements, the ten most important of which are phosphorus, iron, sulphur, magnesium, potassium, calcium, chlorine, silicon, manganese and sodium, but these never all appear in the same plant and are usually absorbed in combination with the organic elements.

Plants being made up of these elements it is evident that a supply of them is necessary to enable them to grow and increase. As we cannot intelligently pursue the study of plants without knowing something of the materials of which they are composed, we will briefly consider their constituent elements and some of the combinations formed by them, first taking the four organic elements, oxygen, carbon, nitrogen and hydrogen. Oxygen exists as a gas, and, combined with other substances, as a liquid and as a solid. It is the most abundant element in nature. As a gas it forms a fifth part of the air, as a liquid eight-ninths of water and as a solid three-fourths of the bodies of animals and four-fifths of the substance of living plants. Oxygen gas may be called the active or positive principle of the air, as all the active properties of the air are due to the oxygen it contains. Whatever the air does, oxygen by itself does far more intensely. Sulphur, which burns in the air with a very pale blue flame, in oxygen burns with a brilliant light; a piece of iron that would take years to rust through in the air is converted into rust in a very short time when placed in pure oxygen. Oxygen gas is absolutely necessary to the life of plants and animals and fires could not burn without it, and if all the oxygen in the world were destroyed they would cease to exist. An historical incident may serve to illustrate the subject. In the year 1756, before the English had conquered India, the Viceroy of Bengal, Lurajah Dowlah, threw 146 English residents at Calcutta into a small dungeon, which has since been known as the black hole of Calcutta. During the night in which they were imprisoned, having breathed up all the oxygen contained in the air of the dungeon and there being no opportunity for a fresh supply of air to obtain admittance, nearly all of them were suffocated. Therefore we find a supply of oxygen is necessary to enable plants to grow and increase.

Carbon exists as a solid, and in combination with oxygen as a gas called carbonic acid gas. As a solid it forms a large portion of the bodies of animals and of the substance of living plants. When a piece of wood is burnt the resultant product is a black substance we call charcoal; this consists of carbon. The product that results from our breathing, namely our breath, consists principally of a compound of carbon and oxygen called carbonic acid gas, which we expel from our lungs into the air. When leaves and vegetable substances decay, the resultant product is a dark matter we call leaf-mould. This also consists principally of carbon, and may be termed the charcoal of decay. The appearance of carbon in living substances, differs very much from its appearance in dead substances, but whether in combination with water making up the greater part of the bodies of living plants, with their graceful leaves and attractive flowers, or combined with oxygen as carbonic acid gas, or simply as the dead substances charcoal and leaf-mould, carbon itself, though varying in appearance, always retains its essential individual character. Therefore we find a supply of carbon is necessary to enable plants to grow and increase.

Nitrogen exists as a gas, and combined with other substances as a liquid and as a solid. As a gas it composes four-fifths of the air, hence it is evident the amount of nitrogen gas that exists in nature is enormous. Nitrogen will not support combustion, that is, in pure nitrogen gas, animals could not breathe or fires burn, not from any poisonous property in nitrogen, but simply from the absence of oxygen. Nitrogen gas may be regarded as the negative or passive principle of the air, restraining and modifying the violence and energy of the oxygen. As a [illegible] in combination with oth[illegible], is present in large quantities in the bodies of animals, and also forms an invariable portion of the substance of living plants. Therefore a supply of it is necessary to them to enable them to grow and increase.

One of the most remarkable distinguishing characteristics of nitrogen is

the highly nourishing properties it possesses. Those foods that contain nitrogen are a great deal more nutritious and sustaining than those that do not contain it. The nourishing character of a food is generally in proportion to the amount of nitrogen it contains, and the presence or absence of nitrogen is a convenient mark or test for the classification of the various animal and vegetable substances. Wheat, oats, peas, beans and lentils contain a large proportion of nitrogen, but such fruits and vegetables as potatoes, turnips, carrots, apples, pears and plums contain very little, and are consequently not very supporting, though useful in other ways.

Hydrogen is an exceedingly light inflammable gas; it is the lightest substance in nature, being fifteen times lighter than air. Hydrogen is not found in nature by itself, but always combined with other substances, and chifly carbon. When substances containing nitrogen are burnt, their constituent elements becoming separated, the nitrogen combines with hydrogen, and forms a gas called ammonia. Hydrogen combined with oxygen forms water which consists of eight parts of oxygen and one part of hydrogen, and considering the vast quantity of water on the globe, it is plain than the amount of hydrogen that exists in nature must be very great. Hydrogen is present in combination with oxygen in the bodies of all living plants and animals; it forms a considerable portion of the substance of living plants; therefore a supply of it is necessary to them to enable them to grow and increase.

Such are the four simple organic elements; we will now notice four very important combinations formed by them. It is very necessary to remember them, as in proceeding with our study we shall frequently have occasion to refer to them.

The four combinations are air, water, ammonia and carbonic acid gas. The air we breathe is an elastic invisible substance, of which when it is at rest we are scarcely conscious, but which when in violent motion possesses enormously destructive properties, as is proved by every storm and tempest that blows. The earth is completely surrounded and enveloped by air, which extends to a height of about thirty miles. Like all other forms of matter air has weight; a cubic foot of air weighs 527 grains, about an ounce and a quarter, and a column of air an inch square and thirty miles high would weigh about fifteen pounds, hence we find that the air presses on the earth to the amount of fifteen pounds to the square inch. The air is composed of two gases, oxygen and nitrogen, of five parts of nitrogen, and one part oxygen. These two constituents of the air are simply mixed together, not chemically combined.

Plants, except those that live under water, cannot exist without air, though some such as mushrooms can live without light. Air ministers to the wants of plants by supporting in its substance quantities of vapors in the form of clouds which modify the direct rays of the sun and from which descend those supplies of rain which are so requisite for the well being of the vegetable kingdom, and also by holding certain gases which are equally necessary to the lives of plants. The next combination of simple elements we must notice is water. Water is composed of eight parts of oxygen and one part of hydrogen. Water is capable of existing in three distinct conditions, in the solid form as ice, in a liquid condition, as ordinary water, and in a gaseous or vaporous condition, as steam. Plants cannot live without water; a constant supply of it is indispensable to their existence. All the inorganic or mineral elements that are necessary to the lives of the plants must first be dissolved in water or watery fluids before they can be absorbed by their roots, and for this purpose, in addition to the dissolving action of the water present in the soil, the roots of plants themselves have the property of secreting a solvent fluid which acts on the mineral particles, dissolves them, and thus facilitates their absorption. Air also contains various gases mixed up with it, as we have before seen; we will now notice two of these gaseous substances, ammonia and carbonic acid gas.

Ammonia is absorbed by the leaves of plants from the atmosphere; it also appears in the soil, and is absorbed by the root, being carried to the earth by rain; hence it appears that plants obtain ammonia in two ways, as it is also obtained in the form of sulphates of ammonia from acids in the soil.

Carbonic acid gas; we noticed that when simple elements combine together they form compounds which differ very much in character from the simple elements of which they are formed, and we noticed that oxygen was absolutely necessary to sustain life, and that carbon formed a large portion of many wholesome foods, but where these two elements combine together in certain proportions they form a gas called carbonic acid gas, which is a deadly poison to them and animals, and in which fires will not burn. It is always present in pure country air, but in such small quantities in proportion to the quantity of air that it does not in the least affect the health. These organic substances also form compounds within the plant, either ternary, which is carbon, oxygen and hydrogen in combination, or quaternary, which are the four elements in combination. Cellulose (or cell walls), starch, sugars, oils and fats which exist in plants are formed chiefly from the ternary compounds. The quarternary compounds go toward the formation of the vital substance protoplasm, and albuminoids, which is the food of protoplasm, they also go towards the formation of alkaloids, which are the properties of plants, whether medicinal, stimulating or poisonous. These compounds are therefore necessarily present in all plants.

The inorganic substances, as before stated, are absorbed with the organic, and occasionally one or more of themselves in combination. They enter into the composition of cells and their contents, vegetable products and secretions. Those which are always present in plants are magnesium, sulphur, iron, phosphorus, potassium and calcium. Thus phosphorus is connected with the formation of the albuminoids, sulphur is a constituent of the vital principle protoplasm, iron is indispensable to the plant for the production of the green coloring of leaves, and other green parts of plants; potassium is associated with the formation of starch. Calcium and magnesium are also essential, but their special functions are unknown.

The World's Fair Contest in Floral Arrangement.

The committee of the Chicago Florist Club has sent the following communication to each of the other Florists' Clubs of the country:

In the arrangement of the classification of the Horticultural Department at the World's Fair, among the sub-divisions of floriculture, that important department of our business known as the arrangement of flowers, was entirely overlooked. And at the suggestion of Mr. John Thorpe, Chief of the Bureau of Floriculture of the Fair, the Chicago Florist Club has taken the initiatory steps looking to the inauguration of a contest that shall be worthy of the great occasion.

The intention is to make this contest international in character, and competition in the various classes is to be open to the world. The date selected is the week beginning August 14, just after the convention of the Society of American Florists at St. Louis, and the week during which the horticultural congresses will be held in Chicago, thus insuring a large attendance of those in the trade and who can take part in the contest without making a special trip for that purpose. This large attendance of experts will also insure an abundance of good judges, which all will recognize as an important consideration.

The Chicago Club would request through its committee that your club appoint a committee to act in conjunction with committees from the other clubs, these combined committees to act as a governing board and determine all details regarding the contest.

As there is not a very great deal of time at our disposal we have prepared a suggested schedule, which is submitted herewith for your consideration and approval or amendment. To facilitate matters we trust that either your club or your committee will make any suggestions thought advisable and at once forward them to the chairman of the Chicago committee, pending the organization of the general board, which will of course elect its own officers.

We would also suggest that your club offer a prize to be competed for in this contest, this to be preferably in the form of some trophy which can be preserved by the winner, and to be known as the prize from your club. The Chicago Club has appropriated the sum of $100 to be used in purchasing a suitable prize to be offered in some one of the classes. But whether your club does or does not decide to offer a prize we ask your earnest co-operation in making the contest a success, and will welcome suggestions and advice as freely from those clubs which do not offer prizes as those which do.

We hope that your club will take immediate action upon this matter, the importance of which we believe will be quite evident to all sister clubs.

For the present please address all correspondence regarding the matter to the chairman of the Chicago committee. This correspondence will all be turned over to the chairman of the general board, when he may be selected by the combined committees of the various clubs.

Yours very truly,

G. L. GRANT, Chairman, 322 Dearborn St
JOHN THORPE,
E. WIENHOEBER,
F. F. BENTHEY,
H. F. HALLE, Committee.

SUGGESTED SCHEDULE.

SECTION 1.

FLOWERS IN HANDLE BASKET.

(Not exceeding 18 inches in diameter or length.)

Class A.—Arrangement of flowers, one variety only with own foliage, no other green being admissible. Without ribbon.

Class B.—Arrangement of flowers in one color, with other green in addition to own foliage. Ribbon to be used.

Class C.—Arrangement of flowers in two colors. Foliage other than that of the flowers used being admissible; but ribbon excluded.

Class D.—Arrangement of flowers both basket and material to be supplied contestants. The form and size of basket and quantity and quality of flowers supplied each competitor to be exactly the same. The material supplied need not all be used. No ribbon.

SECTION 2.

FLOWERS IN BASKET WITHOUT HANDLE.

(Limit of dimensions same as preceding. No ribbon admissible.)

Class A.—Arrangement in one variety with own foliage only.

Class B.—Arrangement in two colors, with adiantum in addition to own foliage.

Class C.—Arrangement of one variety of roses, with addition of one other variety of flower.

Class D.—Same rule as for handle basket in Class D, Section 1.

SECTION 3.

VASES.

(Not exceeding 15 inches in height. To be arranged with view of using on pedestal in corner of reception room. Ribbon excluded from this Section.)

Class A.—Vase of flowers one sort only, with own foliage.

Class B.—Vase of flowers one sort only, arranged with ferns or other foliage in addition to that of flowers used.

Class C.—Vase of flowers other than roses, any foliage admissible.

Class D.—Vase of flowers, vases and material to be supplied under rules for Class D, Section 1.

THE LAGOON IN FRONT OF THE HORTICULTURAL BUILDING AT THE WORLD'S FAIR.

SECTION 4.

BUNCHES.

Class A.—Bridal bouquet.
Class B.—Hand bunch of colored roses.
Class C.—Hand bunch of flowers other than roses.
Class D.—Hand bunch of flowers, materials to be supplied as in Class D, Section 1.
Class E.—Natural arrangement for gift or souvenir showing decided novelty and artistic merit.

SECTION 5.

Class A.—Dinner table decoration, table set with 12 covers. Full discretion to contestant as to materials and style of decoration.
Class B.—Arrangement of flowers in a box to present the best effect when opened. Box not to exceed 16 inches in length or breadth, and boxes to be closed when presented for judging, so they may be opened by the judges, who shall also consider the external appearance of same.

The Lagoon at the World's Fair.

The accompanying illustration gives a view of the lagoon in front of the Horticultural Building, and shows one of the bridges that connect it with the Wooded Island upon which is planted the main out-door exhibit.

At the left is seen the front of the Horticultural Building, while near the center of the picture is seen in the distance the dome of the Illinois State Building, and to the right of that appears the Art Palace. In the foreground is one of the electric launches which skim over the water at a rate of speed that must turn the gondoliers green with envy. They are propelled by a small electric motor to which power is supplied by storage batteries.

A Scale for the Judgment of Excellence in Design.

In analyzing the judgment of one who criticises a thing from the artistic standpoint, we may find out whether he is a good critic or not. The reliable critic must invariably possess a broadness of judgment which, strange as it may seem is rarely possessed by the artistic creator of a thing. Thus, the perfect artist by no means implies the perfect critic, because the artist's talent may be confined—in fact invariably *is* confined—to some special direction, hence, as a critic he would naturally be strongly biased; he can only look backward and forward upon the path in which he is travelling.

Supposing that the completeness of a thing is represented by the theorem of one hundred per cent. we can demonstrate clearly the importance of a *part* of the thing, by allowing it a certain proportion of the one hundred per cent.

We may represent the component parts of a perfect floral design—or, for that matter, an artist's picture in this way:

1.	Adaptibility to purpose,	35%
2.	Color Harmony,	25%
3.	Composition,	25%
4.	Excellence of material,	15%
		100

There may be some question about the proportions of the four parts taken relatively with each other, but there is no doubt about the preponderance in favor of the first proposition. The second and third propositions are usually the ones upon which we rely when expressing an opinion, we are apt to pass the first with a mere acknowledgment, forgetting that *good taste* is inseparably connected with it. The fourth proposition has less to do with art than it has with mechanical perfection. One may build an ugly house with beautiful bricks, and another can create an ugly wreath with beautiful roses. An artist can paint a lovely picture with common house paints on a rough sawed shingle, and the tasteful florist, with deft fingers can weave a beautiful garland out of the commonest and smallest blooms from his garden! Therefore our fourth proposition is of least importance; although, so far as the florist is concerned, *his* success must inevitably depend upon the perfectness of the material he handles, for the reason that it is so perishable!

Good taste, I say, depends directly upon our first proposition; when a man "asks for bread" we should not "give him a stone!" A chair which is not strong enough to sit upon, fails in every direction of art, although it may be exquisitely carved with the dainty fingers of a fairy! The artist decorator who allows his decoration to run riot over his whole design, whatever that may be, ruins it artistically, with a meaningless excess. The florist who forces incongruous material together, and does not depend upon the primal beauty of his flowers, creates a design, which is not worthy of a name! it *must* fail of its purpose, even though nobody is cognizant of the fact! The trouble is, we do not so easily distinguish between the efficient and the inefficient in design. Our judgment is formed by direct comparison, and when we have nothing near by of a good, bad, or indifferent nature, we cannot compare! We need not stop to demonstrate the inefficiency of a bucket which will not hold water. We can and *do* throw it away at once. Yet the same principle which proves the bucket useless exists in the artistic world, and proves the inefficient design, worthless. We do not hesitate to condemn the bad taste of the woman, who in the performance of the daily duties of life, wears her magnificent jewels in street car or dry goods shop alike, with perfect disdain of the fact that they should be seen in drawing room, theatre, concert hall, and ball room exclusively, to testify to refined taste!

Propositions number two and number three, certainly constitute together one-half of the artistic value of a thing. The good critic must possess a full knowledge of the principles of color harmony and form value to decide upon the merits of a certain artistic thing which must depend for its *life* and vigor upon these two all important features of design. One who deliberately or ignorantly places vivid red and delicate pink together, exposes his design to the risk of losing one quarter, *at least* of its value. Another who misadjusts curved and straight lines, or bunches his work together into a solid mass bereft of every line of possible value will lose in the same proportion. In fact, on these two propositions hang all success in *art* work of whatever character.

One may possess excellent taste and wear the best of clothing, but know nothing about art! The floral design may be exactly suited to its purpose, and the grandest blooms may be employed in its make-up; yet the spirit of art can be *entirely absent*. The lavish magnificence and display of some of those grand towering edifices in our great American cities, testify in an unfortunately true way to just this deplorable fact—the absence of the spirit of Art in their make up.

Consequently, we who desire to study art, must go to the crumbling and delapidated palaces and churches of Italy to find the "great and true spirit." There is no nonsense about this, it is *fact* which we cannot brush lightly aside. The florist who studies the colors of his flowers, and who learns of nature how to arrange branches, vines, leaves, and clusters of blossoms, is the man who has the coveted position at the feet of the beautiful goddess. F. SCHUYLER MATHEWS.

[The above was written in response to our request for Mr. Mathews' views as to the relative artistic value of the four parts considered in the scale of points. In view of the coming international contest in floral arrangement at the World's Fair this seemed an opportune time for a discussion upon this question. The many things to be considered in judging an arrangement of flowers makes some *analytical* system of determining values absolutely necessary in order to remove as many obstacles as possible from the path of the judges; and besides it is of great educational value—to both the contestant and those who simply admire—to know just the proportion of merit and demerit the arrangement possessed in the opinion of the judges and wherein was the excellence that won. ED.]

The Pittsburg Hail Storm.

This seems to have been the most destructive hail storm in years. We append reports of the damage done to various florists.

Your inquiry in regard to the hailstorm of the 20th inst. to hand. It was the most severe fall of hail in this vicinity since 1850, and extended over a section at least fifteen miles long and three miles wide, breaking more or less glass in all the greenhouses within those limits. The hail was so heavy that skylights one-half inch thick were smashed and many tin and slate roofs badly damaged. In some sections it crushed every pane of glass in greenhouses and destroyed the plants also. The loss will be very heavy on florists and market gardeners generally, especially on the Allegheny side of the two rivers, where the fall of hail was most destructive.

My place was rather on the edge of the storm, and while I suffered the loss of probably 6,000 square feet of glass, yet my plants were not injured in the least, everything being covered with glass at the time, thus protecting the plants from the hail. The weather being warm now, I will not have to hurry repairs, and that is another consoling feature of the disaster. A. W. SMITH.

I lost between 5,000 and 6,000 feet of glass besides all my stock. Even raspberries and roses outside were totally destroyed. It is doubtful whether I shall rebuild. I would not mind the loss of the glass if I could have saved my stock. The storm came at a very unfortunate time. If it had occurred a week or two later we would have had the bulk of our plants marketed.

SAMUEL GASS.

The hail storm destroyed 60,000 feet of our glass. But fortunately damage to plants was not as serious as feared and we are filling our orders without trouble. Our glass was double strength. Skylights in the neighborhood that were ⅝ of an inch thick were all broken. Our nursery, which is located 1½ miles from the greenhouses, was not injured.

B. A. ELLIOTT CO.

I was certainly in the "belt" this time with both of my places. At my Ellsworth avenue place are the ruins of 13 houses that will never be reglazed and 200 hotbed sash. At this place I lost 22,000 square feet of glass. The houses were full of growing plants and the planting season had only just commenced, so the loss on plants is very heavy. The hail fell in three distinct showers; the first was the heaviest. This broke the glass and the succeeding showers destroyed the plants. At my Highland avenue place I have three houses, and this place must certainly have missed the first and heaviest shower, for only about half of the glass was broken. The loss here is 3,100 feet. These two places are about three-quarters of a mile apart. I had some hotbed sash piled up and the fourth ones from the top were broken as badly as the top one. In one pile of new sash the sixth one down was broken. P. S. RANDOLPH.

I had about 34,000 feet of glass, of which 18,000 was in greenhouses and the rest in hotbeds and cold frames, and it does not seem as though there was any glass worth considering left intact on my place. The plants were terribly injured. I am not only unable to fill my orders, but so many others were seriously injured that I cannot secure stuff from them. Everything is knocked to pieces. The plants look like broom sticks, and in some cases even the pots are broken. The damage done seems almost incredible. At first I was so discouraged that I made up my mind not to attempt to rebuild, but have now reconsidered the matter and will try it again, but I don't want to see any more hail storms. I cannot give the exact loss, but would say that it must exceed $8,000.

JOHN BADER.

Our loss was slight compared to some of the other florists. At a rough estimate we think we lost about 2,000 square feet, and our stock was not seriously damaged, with the exception of our fruit crop outside, which suffered a great deal. We were fortunate in being a little to one side of the storm, so we did not get the full force of it, but some of the florists were almost entirely wiped out. In some places where hotbed sash were piled up one on top of the other, eight and ten deep, there would be nothing left but the frames and a couple of bushels of broken glass. Several of the hail stones picked up in our houses measured 2½ and 2¾ inches in diameter through the oval part, most of them being egg shaped.

JNO. R. & A. MURDOCH.

We lost from 1,500 to 2,000 square feet of glass, all on the north side and none on the south side. But fortunately our plants were only slightly damaged. Our glass was all single strength.

HARTMAN BROS.

I lost about 1,300 square feet of glass by the hail storm. Nearly all was covered by insurance in the Florists' Hail Association. About two-thirds of the number of lights broken were the old single strength. The double strength seemed to stand the hail better, especially the 16x24 size. Plants were not damaged much except some young roses. The hail stones were as large as walnuts at my place.

F. BURKI.

We are thankful to be able to report that our loss was very slight; only 25 to 30 panes in hotbed sash, no breakage whatever in our greenhouses. Our glass is nearly all insured. But the damage done at other places was enormous. In many cases all plants in seed beds were ruined, other again were saved by hastily boarding over the frames. We saw a tin water conductor which had been pierced by hail stones, and new shingles that projected over the comb of the roof broken off as if they had been glass. The new conservatory in Schenley Park suffered severely. The Allegheny Park conservatory also sustained losses, whilst a number of private places lose heavily by injuries to rare and valuable plants.

BECKERT BROS.

We are happy to say we suffered no loss by the storm of the 20th. We do not possess any greenhouses and we consider ourselves fortunate in our poverty.

DUFF BROS.

My loss does not exceed more than $150. I have only a small house in the rear of my store. It was full of all kinds of plants and everything was destroyed.

L. I. NEFF.

We are very happy to say that we did not suffer any by Saturday's hail storm.

PITTSBURG FLORAL CO.

We lost about 1,000 square feet of glass The damage done to our plants will be very light. RICHARDS BROS.

We are glad to say we were among the fortunate ones. Eight boxes of 10x12 glass will repair all our loss on some old houses. No damage was done to plants worth mentioning.

A. M. & J. B. MURDOCH.

Our place is completely wrecked. Glass, plants, thousands of pots, and even some sash bars were destroyed. Our loss in glass will amount to fully 18,000 square feet, counting glass surface, not area covered. The plants were all smashed to pieces excepting a few which were sheltered under or near the gutters. But even these are hardly salable. The hail stones fell through the glass and broke through the sand and slate on the propagating bench. By actual measurment some hail stones were over three inches in diameter. Several other establishments of considerable size are also complete wrecks, and will have to be entirely reglazed.

A. R. REINEMAN & BRO.

I lost only about 700 square feet of glass, and fortunately my plants were very slightly damaged considering the character of the storm, the like of which has never been witnessed before by the oldest living inhabitant here.

JNO. B. FERGUSON.

CONSERVATORY AT LINCOLN PARK, CHICAGO.

Conservatory at Lincoln Park, Chicago.

We present herewith an excellent engraving of the new conservatory at Lincoln Park, Chicago, which will undoubtedly prove quite an attraction to visitors to the city during the Fair. In the palm house—which is the main building—the arrangement is in the natural style, everything being planted out, and not a tub, pot or box is to be seen. The plants have made a splendid growth since we published views of the interior, and the effect is now magnificent. No one in the trade should fail to visit this beauty spot while in Chicago this summer. The plate was loaned to us by the Quaker City Machine Co., who fitted the conservatory with their Challenge ventilating apparatus.

The World's Fair.

A single week has made a great change in outdoor vegetation, and on Decoration Day the Wooded Island was gay with big lilac bushes in full bloom. Columbines, phlox and anemones were showing up bravely and the bush honeysuckles were covered with bloom. Additional planting for summer decoration is now beginning, aralias, bamboos and the like. One of the herbaceous plantings is a display of alpine plants from the Royal Botanic Garden of Berlin, but the effect of this is not pleasing, as all it shows at present is a mound of wildly disarranged rocks stuck full of big labels, with a few little plants cowering timidly behind their names.

The most showy display on the island consists of azaleas and rhododendrons, and they are worthy of a special visit. A bed of hardy seedling azaleas from Anthony Waterer, Woking, England, is now making a beautiful show. They are, for the most part, crosses between sinensis and the Ghent azaleas, and among other tints they show some remarkable yellows, from rich gold to a beautiful apricot. The pinks and rosy purples are also showy. The only white is a cross between mollis and occidentalis, white with a lemon blotch. These azaleas, known as the Knap Hill seedlings, are considered reliably hardy here, and they make a gorgeous display when in bloom.

Rhododendrons are planted on the Island by several exhibitors, but the only plants in bloom were some recently set out, including both hardy and tender sorts. The best displays are from John Waterer (England) and Pitcher & Manda; the plants are large and in fine condition, both bushes and standards, some of the latter looking like a huge bouquet. Here was Everestianum, which, though an old sort and parent to many other hybrids, still remains one of the best. It is rosy lilac, spotted and fringed, a very free bloomer and thoroughly hardy. It is one of the best sorts for forcing, blooming early. Roseum elegans was seen in fine order in the same locality; it is a good old sort, with big trusses of deep rose, very hardy. Album elegans, blush, changing to white, excellent and hardy; Lady Eleanor Cathcart, pale rose, spotted chocolate, and Mrs. John Waterer, bright rose, spotted, two seedlings from Everestianum, were extremely fine, and are very hardy. They are both excellent forcers.

But the largest and most varied collection of all is from Anthony Waterer of Woking, England; it is not on the island, but it is under charge of the Landscape Department, and has been used beneath the terrace at the north end of the Manufactures Building. This is a very sunny and open situation and the plants are disposed under a canvas shading. A large number of varieties are shown, most of them being now at their very best, though quite a few later ones have not yet begun to expand their blooms. The display should be fine for another fortnight, if the weather is favorable.

In this collection Everestianum is in fine order; handsome bushy plants clothed with huge trusses of bloom right to the ground. We are told that the light colored flowers take the best, as a rule, and this sort, being so attractive in form and color, so thoroughly hardy and such an excellent forcer, seems the ideal of a commercial rhododendron. For the American trade, hardiness is a prime requisite. Prince Camille de Rohan, a most attractive blush, with dark eye, is another fine forcer for early work, while Picturatum, cream, with a chocolate blotch, a very showy sort, is useful for late forcing. Edward S. Rand, a rich scarlet of most brilliant hue, is excellent either for forcing or as a hardy garden sort. Fastuosum, fl. pl., which was displayed in fine condition in this collection, is a charming mauve, with immense trusses of double flowers; it is fine for forcing, but is not reliably hardy with us. Kettledrum, a rich rosy purple, is very hardy; Florence, a most attractive pink, with a light center, Delicatissimum, blush, edged pink, Album triumphans, white, and Beauty of Surrey, scarlet, are all excellent for garden use. For early forcing, Blandyanum, rosy crimson, Broughtoni, rosy crimson, Limbatum, white, margined crimson, and The Queen, blush, changing to white, are especially recommended. For late forcing, The Warrior, rosy scarlet, and John Spencer, rose, margined with deep pink, are very good. To look along the Anthony Waterer display, it was a bank of big trusses, mauve, pink, rosy purple, cerise and rich red, a large proportion of these showy plants being thoroughly hardy here. It made the finest rhododendron display at the Fair.

Across the lagoon facing the above exhibit was another display of rhododendrons from various foreign houses. Moser of Versailles, France, made a fine show of big plants, some of which were displayed in the Horticultural Building, while others were used at points of vantage by the Landscape Department. This exhibitor had some very large specimen plants, which were set fully with buds when they reached Chicago a few weeks ago; they travelled in fine order and are now in good bloom. Aug. Van Geert and Ch. Vuylstek of Ghent, Belgium, made quite a good display, though confined to but few varieties. Among their varieties was Geo. Cunningham, white, strikingly spotted with maroon, a very distinct old sort; Cynthia (Syn. Lord Palmerston), a rosy crimson and one of the best forcers, and Sappho, a white, distinctly blotched with maroon, which is recommended as an excellent forcer. The German rhododendrons, while showing some fine sorts, were mostly small plants.

The tulips in front of the Horticultural Building are beginning to fade now, (Vaughan's display) the best at present being those on the west side of the build-

ing. The same is true of the pansies, the west side making the greatest show of bloom. The herbaceous display on the island is not very gay yet; though the pæonia buds are swelling rapidly, they are not yet in bloom and much of the collection is far behind.

On Friday last there was the excitement of a fire under the mound in the great dome of the Horticultural Building; that it was promptly extinguished without damage was due to the presence of mind displayed by "Uncle John" Thorpe. As soon as the fire was discovered some one started to turn in an alarm, but Mr. Thorpe promptly stopped this, fearing for the safety of his cherished plants if the fire brigade got among them. Men were stationed at the different hydrants, and the chief himself entered the grotto, armed with a hose, and extinguished the fire. The damage was only trifling, but it was a narrow escape from a serious disaster.

Seasonable Hints.

The plan we propose in order to avoid planting the carnations in open ground is to grow them in pots instead. Shifting to larger sizes as occasion requires and planting into the benches for the winter at such time as may be deemed advisable. Of course this is all a matter as yet untried and may not be feasible, but we think it worthy of experiment. Frames for the reception of the plants may be used or not as experience may dictate, and we think the pots should be plunged in ashes or in the dirt itself. Excessive evaporation would thus be avoided. We would set the pots in lands four feet wide, leaving a two foot path between each land.

Starting then with the plants such as we would otherwise plant in the open ground we transfer them to 3-inch pots and plunge them in the frame or bed. This operation will take no longer than to plant out the same number of plants. In the frames they would require but little attention excepting to water, weed and top them when necessary. With the exception of watering this is all work essential to do in the field, and it can be done much better in the frames and quicker. They would possibly grow six weeks to two months in the 3-inch pots before they would need another shift, which would be into 4-inch and some of the stronger ones into 5-inch. It is hardly likely they would need to be repotted again as this would carry them into September or October, at which time or before the houses would be ready for their reception. Provision must be made for watering all the beds readily with a hose. We should say (but without having any data for comparison) that the labor connected with this mode would not be greater per 1000 plants than in field culture, perhaps not so great and far more pleasant. The greatest drawback we can see is the expense of the pots; but once bought they would last for many years if properly taken care of. The percentage of loss in the field is often heavy. This loss would be reduced to a minimum by pot culture and the difference would we think pay for the pots every year.

We would be inclined to make the following claims for this method: First: Less labor and that of a more pleasant kind. Second: Complete control of the plants in regard to watering. Third: Complete control of the soil ingredients. Fourth: Great saving of ground area. As to this point we would say that 1000 plants in the field planted 12 by 9 inches apart would occupy about 757 square feet of room; in 3-inch pots 76 square feet allowing two feet alley room; in 4-inch 167 square feet; in 5-inch 285 square feet; and in 6-inch 310 square feet. Fifth: Greater facility to fight insect and fungoid pests. Sixth: They are ready to move into house at any time. Seventh: The working roots are of course not lost by the transfer. Eighth: Loss of plants would be almost nil with intelligent supervision. Ninth: Shading on the house at time of planting entirely unnecessary. Tenth: We would anticipate a better crop of finer flowers during the winter.

Ten good points to be sure. But then this is all a matter of speculation. Let it be tried on a small scale first.

Avondale, Pa. W. R. SHELMIRE.

Philadelphia's Loss.

The news of the destruction of Horticultural Hall at Philadelphia will be received with deep sorrow in every place wherever a lover of horticulture is to be found, and sincere sympathy will not be lacking for that sturdy organization the Pennsylvania Horticultural Society which has pluckily lived through in the past what would appear to be its full share of calamity and misfortune, and has now been called upon for the third time in its history, to witness the destruction of its home by fire.

The Florists' Club of Philadelphia too, universally acknowledged as the noblest of all organizations of its kind will not be forgotten by the brethren throughout the country who have on so many occasions been the recipients of its fraternal generosity, and have so often experienced within the walls of the historic old edifice the full meaning of a warm-hearted Philadelphia welcome. Philadelphia's loss is the whole country's loss.

The one gratifying feature in this disaster is that the horticultural library has escaped serious injury, and that through the wise forethought and care of Secretary Farson the valuable records of the Society's work are saved intact. Had the library been located in any other part of the building than where it happened to be nothing could have saved it from total destruction.

The occurence will not have been entirely without good results if the warning be heeded and the lesson taken to heart by our horticultural societies which are committing the folly of exposing their libraries and recorded work to the dangers and risks attendant upon the public use of large halls for fairs and other entertainments, in which large quantities of muslins, tissue paper, pampas plumes and other flimsy and inflammable material are used for decorating. It is deplorable that the existence of our horticultural organizations in America should be forced to depend on such means of revenue for existence, but since it is so too much care cannot be exercised in protecting by every possible means their priceless horticultural treasures.

It is to be hoped that the many friends of horticulture in the State of Pennsylvania will not overlook the opportunity now afforded them of furnishing a new home for their society which shall be better than the old and in all its appointments equal to the grandeur and dignity of the horticultural interests of the great state which it represents.

Key to Diagram.

A

2 White.
3 Dr. Faust.
4 Blue.
6 Blotched.
7 Yellow.

C

33 Imperial German Silver seam.
82 Burpee & Defiance finest mixed.
35 Victoria 38 Emperor William.
39 Fire King.
40 Rosy Morn.
41 Imperial German Crown Prince.
42 " " " Black Prince.
43 " " " splendid mixed.

D

49 A grande macule de Lemoine.

F

73 Oculata aurea.
75 Emperor William.
76 Atropurpurea marginata alba.
77 Trimardeau, King of the Black.
79 All sorts mixed.
80 Lady in white.
82 Lord Beaconsfield.
83 Odier.

G

85 Show.
86 Fancy.

H

97 Dr. Faust.
98 Odier or blotched.
101 Lord Beaconfield.
102 Pure yellow.
103 White,
104 Dark purple.
106 Snow Queen.
107 Fawn color.
108 Black blue.
109 Fine large English.
111 Thorburn's superbe.
112 Light blue.
113 Margined.
116 Dark blue.
117 Bronze colored.
118 Azure blue.

I

122 Ash grey.
123 Victoria.
126 Azure blue.
127 Dark violet.
128 Light blue.
129 Emperor William.
131 Purple violet shades.
132 Odier.
135 Black, nigra.
137 " brown.
138 Auriculaflora.
139 Pure yellow, black centre.
140 Bright golden.
144 Snow flake.
145 Dark purple.
148 White black centre.
149 Best show flowers extra.
150 Fancy mixed.

J

157 Light blue.
158 Emperor William.
159 Peacock.
160 Azure blue.
161 Lord Beacousfield.
162 Marginata alba.
163 Silver edge.
164 White.
166 Dr. Faust.
167 Violet.
168. Yellow.
169 Pelargoniaflora.
170 Auriculaflora.
171 Wallflower colored.
174 Rosy lilac.
175 Copper scarlet.
176 Black.

K

181 Superb mixture.

L

189 Light blue.
196 Cliveden blue (purple).
198 Emperor William.
199 Black, bronzy centre.
201 Silver edged.
202 Yellow, black centres.
203 Black blue.
205 Lord Beaconsfield.
206 Azure blue.
208 Cliveden white
209 " yellow.
212 Black.
213 Meteor.
221 White, black eye.
222 Purplish violet.
123 Snow flake.

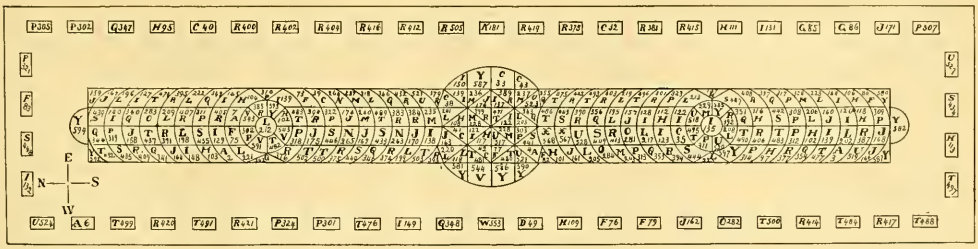


DIAGRAM OF THE SOUTH PANSY BED IN FRONT OF THE HORTICULTURAL BUILDING AT THE WORLD'S FAIR.

225 Fawn color.
217 Victoria.
218 Pure yellow.
219 Mahogany color.
220 Light blue.

M

229 Emperor William.
230 Snow Queen.
235 Red colored.
236 Lorenz's improved red ground.
237 " " yellow "
238 " " white "
240 Fiery Dragon.
243 Lord Beaconsfield.

N

263 Auriculaflora.
264 Fiery King.
265 Pelargoniaflora.

O

280 Large black.
281 Victoria.
282 Mixed.
283 Pure yellow.

P

301 Purpurea oculata marginata.
302 Odier, gelbgrundig.
303 Schwarz-blau set.
305 Odier 5 Fleckig.
307 Goldlack farbig.
308 Azurea.
309 Lasurblau.
310 Bronze and auricula color.
311 Gold Else.
312 Crocea.
313 Lord Beaconsfield.
314 Negerfuerst.
317 Schucewittchen.
318 Atrosanguinea.
319 Emperor William.
321 Odier weissgrundig.
322 Lillarosa.
323 Meteor.
324 Purpurea marmorata.

Q

337 Snow Queen.
440 Pure yellow.
341 White.
342 Bronze and auricula color.
343 Silver border.
344 Emperor William.
346 Yellow shades.
347 Odier 5 blotched.
348 Black, violet eye.
349 Purple.
351 Dark blue.
353 Lord Beaconsfield.
354 Dr. Faust.
355 Brown, red.
356 Light blue.

R

373 Brown with gold bronze.
374 Black " " "
375 " " " violet.
376 Dark fine sorts.
377 Dr. Faust.
379 5 spotted on yellow ground.
381 5 " " colored "
383 Large spotted on yellow and reddish ground.
384 " " " red ground.
385 " " " white "
387 " " " yellow.
389 " " " " red edge.
390 Light blue.
391 Emperor William.
392 Dark blue.
393 Blue, black shaded.
394 Lord Beaconsfield.
395 Purple violet.
396 Rosy lilac.
399 Bronze.
400 " yellow centre.
401 Meteor.
402 Velvet brown yellow centre.
403 Havana brown
404 " " yellow centre.
405 Deep yellow.
406 Gold Else.
407 Pale yellow.
408 Snow Queen.
409 White.
412 Brunhilde, purple brown with gold seam.
413 Victoria.
414 Marbled dark.
415 " white ground, white edge.
416 " yellow " gold "
417 " colored.
419 Azure, white edge.
420 Black, red and white edge.
421 " " " yellow "
422 Little red riding hood.
432 Orange yellow.
505 Mixture of Exhibitions flowers.

S

433 Auriculaflora.
434 Wallflower colored.
435 White.
439 Yellow.
440 Black with gold bronze.
441 Silver edge.
442 Azure blue.
443 Light blue.
444 Lord Beaconfield.
445 Emperor William.
446 Pelargoniaflora.
447 Snow Queen.
448 Odier.
449 Victoria.
450 King of the black.

T

470 Violet with yellow.
471 Bronze.
473 Emperor William.
474 Purple, violet shades.
475 Little red riding hood.
476 Gold Else.
477 Dr. Faust.
480 Large spotted on red ground.
481 " " on yellow, reddish ground.
482 " " white.
483 " " yellow.
484 Marbled dark.
485 Rosy lilac.
486 Light blue.
488 Marbled colored.
489 Fiery colored.
490 Deep yellow.
491 Black, with red and yellow edge.
492 Snow white.
493 Havana brown.
495 Dark blue.
496 Meteor.
497 Marbled, white ground.
499 Black, red and white edge,
500 " with violet.
502 Dark fine sorts.
503 Blue, black shaded.

U

517 Bronze and auriculaflora.
518 Snow Queen.
519 Dr. Faust.
520 Emperor William.
521 Yellow.
522 Victoria.
523 Lord Beaconsfield.
524 Odier.
527 Wallflower colored.

V

541 Victoria.
543 Meteor.
544 Blotched and stained.

W

553 Extra choice fancy.

X

567 Victoria.
568 Cardinal.

Y

678 Purplish violet.
580 Snow Queen.
581 Emperor William.
582 Duchess of Edinburg.
585 Yellow black centre.
586 Striped or mottled.
587 Odier or blotched.
590 Lilac rose.
592 Peacock.
593 Victoria.
594 Plissee.
597 Dr. Faust.
598 Bronze.

Boston.

Preparations for the Decoration Day rush are being made all around and the usual extensive demand is looked for. The plant trade has been at its height during the past week. More plants than ever are being used for Decoration Day. This is not to be condemned, for the utility of a basket of plants which will provide bright bloom on a cemetery lot all season long is apparent, but somehow the sentiment which prompts the strewing of spring flowers gathered from the fields and gardens seems lacking in the plant custom, and the demand for hardy herbaceous and shrubbery bloom which has always been so marked a feature of Decoration Day trade here is not likely to suffer much. And it is fortunate that the weather has been such as to avert the famine in this class of flowers which the tardy advent of spring weather had rendered probable. Lilacs are just in their prime. Spiræas in several species, mollis azaleas, exochordas, irises, poet's narcissus, valley, etc., are waiting to be cut, and even rhododendrons are showing color in favored spots.

The custom of filling the store windows with so-called "mortuary emblems" made of milk-weed balls, cape flowers, immortelles, etc., and trimmed with cloth imitation flowers, which is practiced by some of the city florists, meets with more or less adverse criticism from those who are interested in the fresh flower trade, and from those whose appreciation of the true significance of the beautiful Decoration Day custom prevents their seeing anything attractive or fitting in these artificial contrivances, but nevertheless they seem to have considerable attraction for the multitude, and the windows where they are displayed draw large crowds of sightseers.

Mr. F. Sander and lady of London are here, accompanied by Mr. Alfred Dimmock, and are spending the time in visiting the many private collections of rare orchids and other plants in the vicinity. Mr. Sander expresses much satisfaction with the apparent increase in popularity of orchids as compared with what he saw on his last visit five years ago.

The contest over the "Franklin Fund," in which both Philadelphia and Boston are interested, has been finally decided in favor of these cities, and consequently the big bequest will be available at once for the benefit of the magnificent new Franklin Park.

The Boston *Transcript* has received more floricultural light and now an-

nounces to a waiting world that the daffodil has superseded the chrysanthemum for boutonniere purposes.

The Rhododendron Show will be held in Horticultural Hall on June 6-7.

Mr. Herbert Harris of Halifax, N. S., is in town.

Philadelphia.

Horticultural Hall, the home of the Pennsylvania Horticultural Society was almost entirely destroyed by fire last Saturday evening, 27th inst. Fortunately the library and meeting room of the society, as well as the superintendent's office on the opposite side of the building, escaped the flames, although there will be considerable damage from water. The books however all being enclosed in substantial cases with glass doors appear to be all right and the society is to be congratulated that matters are no worse in this respect. The hall the past two weeks has been occupied by the "Candy Fair," an exhibit of confectioners' goods and the appliances for making the same, as well as displays of other fancy articles used in connection with their business.

There were some fifty or sixty booths arranged under the galleries either side of the hall as well as down the centre. All these were made of frame supports and trimmed with bunting, cheese cloth and other light fancy and very inflammable material. The decorations consisted of pampas plume arches along the gallery and silk banners, while cheese cloth streamers canopied the entire hall. Every precaution is taken, when displays of this kind occupy the premises, to guard against fire, as about two years ago flames breaking out during a pure food show were stopped just in time and no serious damage resulted.

The present disastrous fire was started by a person lighting a gas jet with a piece of twisted paper, the flames from which as they turned around, set fire to some of the trimmings of the booth.

Secretary Stewart, who was in town, was being shown about the hall by Mr. Farson, and they were almost in front of the booth when the accident occurred. Mr. Stewart said the blaze was only about as large as his hat when they first saw it. They tried to tear the decorations down and buckets of water were used immediately, but as soon as it reached the front of the gallery and touched the pampas plumes all hope was gone. The cheese cloth canopy ignited and carried the flames to the ceiling in a moment and the whole room was in a blaze five minutes afterwards. The fire department responded at once, but the best they could do was to confine the flames to the building.

The floors of the foyer and main hall seem to be intact, although covered with the debris of the roof and galleries, which fell in upon them. All the lower hall is thoroughly soaked with water. The walls of the building seem to be all right at present and if found to be uninjured the loss will be fully covered by insurance, which was about $75,000. There was a special insurance of $3,500 on the library and contents, which will more than cover any loss there. Down in the Club room there was no damage done except by water, which is some two feet deep, covering up the bowling alleys and almost up to the body of the pool tables. The club has an insurance of $1,200, which it is believed will cover the loss, if the alleys shall be found when dried out, to be warped or in such condition they will have to be relaid. There was to have been a match that evening, and most of the boys who were early on hand managed by one excuse or another to get through the fire lines and stood about in groups discussing the disaster and gazing on the ruins.

It is of course too soon to say what efforts will be made to rebuild the hall, but no doubt everything will be in order for the chrysanthemum show in the fall. So far as we can learn there was no accident to anyone. Although there were quite a number of people in the building all managed to get out safely. Secretary Stewart says that too much praise can not be given to "Dan," who after working desperately to subdue the flames rushed about the building warning everybody to get out. Mr. Stewart had a narrow escape, as in helping to carry out a chest filled with books, a brick dropped from the cornice over the front entrance and struck the lid, splitting it in two. It is needless to say he did not go back again.

The Horticultural Society held its first exhibitions in the Chinese Museum, which was afterwards destroyed by fire. In 1866 a building was erected on the present site by the society, but as they failed after a time to meet the interest on the bonds, it was sold at sheriff's sale and bought in by President Schafler of the society who generously gave them free use of the hall whenever needed for meetings and exhibitions. In 1873 the building was entirely destroyed by fire, which resulted from gross carelessness of the firemen during the progress of a fire in a church across the street, on the south side of the hall. The building was reconstructed by Mr. Schaffer, and at his death, was given to the society by his sister, to which it had been left by him. The building and site was estimated to be worth at least $200,000 and is managed by a board of trustees, for the society.

There is little to be said of trade the past week. It has fallen off a great deal and while there will be a spurt about Decoration Day and for the June weddings, the season may be said to be almost over.

The store windows of the large retail dry goods and furnishing stores display a number of immortelle designs for Decoration Day. These are generally ordered by the firm exhibiting them and presented to some Grand Army Post to decorate the tombs of their fallen heroes.

The bedding plant men are very busy and say they can hardly keep up with their orders. This is John Westcott's first season as a grower and he is very well pleased with the trade he is doing. His new dwelling is completed and he expects to move in the coming week. K.

New York.

The decorations of Madison Square Garden, by Thorley, on the occasion of the ball given in honor of the Spanish Princess on the evening of May 26, were on a scale of magnificence such as is rarely seen. In addition to the fact that the quality of the flowers used was of the highest order it can also be said that great taste was displayed in the work throughout, and the whole decoration was an artistic success in every respect.

From the street to the ball room the various entrances were bowers of green, the ceilings and walls of the halls and stairways being entirely hidden in laurel, hemlock and palms, through which the electric lights shone with beautiful effect, masses of lilies, cattleyas and hybrid roses being abundantly used to good advantage. The ball room was profusely garlanded on walls and gallery fronts with roses, lily of the valley, cattleyas and bougainvilleas, and in each recess on the wall under the galleries was a large crescent of hydrangeas, sweet peas and ferns, large loops of pale blue and white ribbon being freely used. The stage was banked high with palms and foliage plants, among which were interspersed quantities of longiflorum, American Beauties and other showy bloom. The fronts of the balconies were hung with festoons of white and pink roses and the rail covered with numerous bunches of the same all tied with broad satin ribbons of pale blue or white, while in each recess hung a blooming plant of Odontoglossum citrosmum. The bower in one of the galleries, where the Princess sat, was a triumph in floral decorations. The whole front was thickly massed with dark pansies, Cattleya Trianæ, bands of lily of the valley and clusters of Mme. Testout roses and festooned with rich garlands.

Mr. John Young sailed for Europe per steamer La Touraine early on the morning of May 27. A few of his associates repaired to the steamer on the preceding evening to say good bye and wish him a prosperous voyage. They found him in high spirits, quite English looking in spite of his French surroundings, and it was noticed that his voice had already attained the proper accent, as he invited them to "come down to me stateroom don't ye know, blawst yer bloody, bloomin' h'eyes." Johnnie's friends had not omitted the usual floral greeting, for among the great collection of fragrant offerings on the saloon table was a big wreath of La France and galax leaves which bore his name. Some of the boys tarried until nearly the hour for sailing, and when they departed they left various remedies for sea sickness in full supply in the stateroom locker.

Preliminary schedules for the fall show of the New York Florists' Club will be sent to all members of the club at once, and any member desiring extra copies, or any one not a member of the club, who wishes, may have as many copies as desired if they will address Mr. C. B. Weathered, 244 Canal street.

Mr. Robt. B. Young is still confined to his home by severe sickness.

Recent visitors to New York: Mr. Theodore Outerbridge, of Bermuda, and Mr. P. Welch, of Boston.

Chicago.

At the last meeting of the Florist Club routine business was quickly disposed of and at an early hour those present sat down to the monthly spread. When the cigars were passed President Hauswirth called on the "only" Frank Dan Blish—of the "Flat Top Type"—to tell what he didn't know about boilers for greenhouse heating. Mr. Blish retorted that with such a subject he might need all night in which to respond. He ignored the boiler question, and told his experience in trying to find the new quarters of the Club. He said he had tagged on behind a Salvation Army procession for half an hour before he discovered they were not florists on the way to the supper. The chairman then proposed a toast to the projected contest in floral arrangement at the World's Fair and called upon Mr. Grant, who urged upon the attention of the members the importance of the contest as an educational feature of the Fair. He hoped that the contest would bring the real artists in the profession together where their work might be viewed, not only by the general public, but by the

many members of the trade who will undoubtedly be present, with the result of elevating the standard all over the country. He spoke glowingly of the future of this department of the trade, and was followed by others who indorsed what he had said and enlarged further upon the subject. Mr. Holzapfel responded for "The Ladies" and closed his remarks with a motion that members bring their wives and "best girls" to the next supper. The motion was carried by a unanimous vote and the ladies will grace the next occasion with their presence. The "Glue Bros." supplied excellent music, Mr. Sanders favored the company with another of his old English songs, and a new member, Mr. Dunford, rendered a negro song with fine effect. Uncle John had been to another banquet the night before and didn't dare to try two such affairs on successive nights.

At the next meeting a paper on azaleas will be read by Mr. Schiller, who is in charge of the German floricultural exhibit at the Fair, and subjects were assigned to several other members for papers to be read at future meetings.

Decoration Day trade, as generally reported, was large, though Sunday and Monday were busier with the commission men than the holiday itself, and there was but little done, either wholesale or retail, after noon on Tuesday. The shipping trade was very large, and a great deal was done in pot plants, particularly pansies. Prices were generally moderate, but that is usually the case on this occasion, as there is a good deal of cheap stuff on the market. Lilac and honeysuckle were chief among shrubs, there being but little else in that line. Good Cape jasmine was sold in large quantities, though at low prices. A good many shippers are now sending this packed in Florida moss, and the flowers travel admirably; they retain their color much better if left in the moss and put in the ice-box without unpacking than if taken out and put in water.

Among the cheap flowers sold were the shooting stars (Dodecatheon Meadia) and wild violets; there are very few garden violets now in the market. Gladiolus began to come in last week, but the quantity is somewhat limited. Auratum is fine, though not bringing a high price. Candidum is selling much better since the supply of Harrisii grew less, and it is good in quality. Sweet peas still run about the same. White carnations sold much better than colored for Decoration Day; short-stemmed reds are practically unsalable except on rare occasions, and there is but an unsatisfactory market for short-stemmed white.

Roses are growing smaller, but continue good in color. Brides seemed in especial favor this week, bringing $6. Beauties are fair, and a good stock comes in. Galax leaves sold very well for Decoration Day, though the price is very low. A number of small dinners or banquets helped the retailers this week, and some special decorations are looked for during the visit of the Spanish Infanta.

Baltimore.

A fine week for outdoor work has been a great help to the plant men, and most of them seem to have about finished their work of planting out. It is a precarious business at the best, this growing blocks of bedding plants, but then they only take up the houses part of the time, and even if bad weather and changeable taste leave a lot unsold occasionally, there is a living in them even at two cents, at which price very good alternanthera is offered this spring.

If one could only know what the other fellows are going to let alone, so that he might grow it, or what they are going to grow, so that he might let it alone, what a help it would be! The only way to find it out seems to be, wait till the last moment, then go around among the florist places and observe narrowly what is being grown, then plant what you see least of. A list of the actual number of plants grown by each member would be a valuable addition to the library of the club, and would, no doubt be frequently consulted. Herein one could find how many Perles were to be set out and by balancing the skill of the growers and number of plants against the probable demand, he could tell whether to plant Perles or let them severely alone; the same might be said of every other rose and crop of any kind. But it would be a game of "Who comes last" and no one would want to head the list, besides individual ability counts for something. What avails it if no one in the county is booked for a crop of carnations if carnations and I are out, whether from soil, houses or stupidity? If I were wise I would keep as carefully away from them as if every other man in ten miles had ten thousand of them. Then again many would make it a game of "Follow my leader" and say "There's Mr. Clod going into Meteors, and he is always lucky, let's grow a few ourselves," and by following the lead of some one or other produce worse gluts than before. So perhaps the trade is not ripe for pool projects yet in any shape.

Cut flowers are a drug. The town is full of fine flowers selling for what they will bring, little enough generally. Decoration Day will help, but only a little.

MACK.

Denver.

The first smoker of the club was attended very largely. All were more than satisfied with the spread furnished by our president, Mr. H. H. Given. Denver has already gained some prominence as the city to entertain and this was no exception. Among the most entertaining responses to toasts were "Landscape Gardening," by John Berry, and "The commercial value of carnations," by Mr. Chapman. Mr. Sked's paper on the rose was not a small feature.

Referring to the forcing of roses he reminded his hearers of the necessity of planning a full year ahead and laid special stress on the necessity of having first class young plants to start with, and believed that these should be grown on the place when possible. He believed that four inches of soil in the benches would dry out more quickly here during the winter than three inches would in the east, and that this must be taken into consideration by growers accustomed to eastern conditions. He attributed the failure of Denver growers to produce good roses in the past to the lack of suitable houses and other conditions that eastern growers were always careful to meet before attempting to produce cut blooms. While Denver gets more sunshine during the winter months than most other cities the lack of humidity in the air is a great difficulty for the grower to overcome. He recommended more frequent syringing as the best available means to overcome the difficulty, being careful to provide abundant drainage so as to avoid the danger of getting the beds too wet.

Musical talent is showing itself and helped the social life of the entertainment.

A visit to the Fort Nursery, Lacky & Loken proprietors, reveals an already apparent fact that the south side is coming to the front as the cut flower producing locality. They are preparing a very large new house 20x200 for chrysanthemums for cut flowers. They report business as good.

Sweet peas are very plentiful and help the appearance of the retail stores much. A large section of school land has been leased by Haycox & Beer just east of the City Park and a $10,000 plant will furnish stock for their new store next winter.

LYLE.

Catalogues Received.

H. A. Daacke, New York, Dutch bulbs; Peter Van Velsen & Sons, Overveen, Holland, Dutch bulbs; Wm. Fell & Co., Hexham, Eng., nursery stock; Brand & Wichers, San Antonio, Fla., bulbs, seeds and plants: D. M. Andrews, Milton, Wis., aquatics; Kuyk Bros., Hillegom, Holland, Dutch bulbs; H. H. Berger & Co., San Francisco, Japanese lily bulbs; Hart & Crouse, Utica, N. Y., heating apparatus; California Seed, Bulb and Plant Co., seeds, bulbs and plants.

MORRISTOWN, PA.—E. Metcalf has just erected a new house 60 feet long, and reports a brisk spring trade.

HUSTEAD, O.—The name of the new firm that will start here is the Botley & Yates Co., and not Spraggins, Yates & Co. as reported in issue of May 11. They will commence this fall putting up four double and two single houses. Mr. Botley has for a number of years been assistant foreman in the large establishment of C. A. Reeser, the well known florist of Springfield, Ohio. Mr. Yates has also been in the employ of Mr. Reeser.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—By young single man, where cut flowers are grown; some experience and want to increase knowledge. Box 124, Westminster, Md.

SITUATION WANTED—By a young florist, experience in roses, carnations, violets, general plants, and a good floral worker. Good references. Address J, care American Florist.

SITUATION WANTED—Position as foreman; first-class rose grower and propagator of florist stock of the first quality. Can make up decorations, etc. E F G, care American Florist, Chicago.

SITUATION WANTED—On private place, by a German gardener, married, with small family. Good greenhouse hand; can also attend to horses. Address JULIUS KOEGEL, 31 Harlem Av., Oak Park, Ill.

SITUATION WANTED—By a man of 31: starvation not wanted; there is plenty of room out of doors to sleep in, so no potting shed apartment wanted. Wages to be paid weekly, cash. Willing to do a man's work not a slave's. For particulars address WORKINGHAND, care American Florist.

WANTED—A competent gardener; one accustomed to plants as well as vegetables and gardening. Apply to S. H. VELIE, Moline, Ill.

WANTED—An empty greenhouse to rent, near New York preferred; must be a bargain. H. BEAULIEU, Roslyn, N. Y.

WANTED—Two experienced rose growers. Steady work and good wages to the right men. O. P. BASSETT, Hinsdale, Ill.

WANTED SOON—A sober, reliable, single man, thoroughly competent, as florist and gardener. Call or address MOSES LARGUES, 901 Grand River Ave., Detroit, Mich.

WANTED—Single man of energy and ability for roses and cut flower stock. Address with terms and experience. J. T. WILLIAMSON, Prop. La Rose Gardens, Memphis, Tenn.

WANTED—Young man as assistant in cut flower store; must have experience in the business; first class references required; state nationality and wages expected. C. A. DAHL & Co., Atlanta, Ga.

WANTED—Single man for general greenhouse work who understands his business; $15 to $20 a month and board; well recommended from last place. E, care Moore & Simon, 149 North 3rd St., Phila., Pa.

WANTED—Three good men in greenhouses; must be sober, able and energetic. Address with terms, experience and references to
WILLIAM PLUMB, Managr. West View Floral Co., West Atlanta, Georgia.

WANTED—A single man that can grow good cut flowers, to take charge of our cut flower houses. He must give references, also names of last employers; state terms with board.
T. S. JOY & SON, Nashville, Tenn.

WANTED—If Robt. Caughley, formerly in the employ of S. D. Bradford, Colorado Springs, Colo., will communicate with him he will learn something to his interest. Mr. Caughley when last heard from was in St. Paul, Minn. S. D. BRADFORD.

WANTED AT ONCE—A single man, sober, honest and capable to take charge of greenhouses and outside work. A fine situation to the right person. Address MRS. ROBERT ARNOLD,
165 Winchester Ave., New Haven, Conn.

WANTED—Married man with no children to take charge of private place; must understand rose growing and the care of miscellaneous plants. House furnished. State salary. Address GARDNER,
311 First National Bank, Chicago, or call at 11 a m.

WANTED—Protestant, American, German, Scotch or Swede; must be steady, sober, reliable, honest, and have practical experience in making of mushroom beds and taking care of N. H. grapes. Unaccommodating or conceited loafers need not apply. Fair wages and per cent. of our established business to a worthy man willing to work hard to my interest.
ALFRED E. BAKER, box 252, West Chester, Phila., Pa.

TO RENT—6 houses in Chicago with 11,000 feet of glass, stocked with forcing stuff, roses, carnations, violets, smilax, etc. Address
R P. care American Florist.

FOR SALE—3,000 feet of 4-inch Hitchings pipe; also valves, tanks and other fittings. Terms cash. Half list price. Address B. SCHROETER,
114 Elmwood Ave., Detroit, Mich.

FOR SALE CHEAP—Second hand No. 1 Exeter boiler, 18 sections, 25 horse power, as good as new; steam gauge, water gauge all complete. Price $80. This is half the price of new. Address
J. G. BURROW, Fishkill, N. Y.

FOR SALE—Controlling interest in old established seed store. Contracts for 1896 all placed. Large growers of onion sets. Must get out of business on account of failure of my eyes. Suitable terms on good security. Address
SEEDSMAN, care American Florist.

FOR SALE—Florist business, consisting of 2 new greenhouses 100x25 feet and 50x16 feet, also new 9 room dwelling, all heated by the Furman steam boiler. Three lots, each 50x180 feet. Fine location in a rapidly growing city, 1 hour's ride from Chicago. Will be sold at a bargain on account of poor health. Apply to J. B. MODERWELL,
Masonic Block, Waukegan, Ill.

SPLENDID OPPORTUNITY—To let on lease for eight or ten years, a large property for greenhouses in most desirable locality; extra good home market; church near by, street cars running past premises, and within twenty minutes' ride of public buildings. Address J. W. Moore, St. Vincents' Seminary, Germantown, Philadelphia, Pa.

FOR SALE.

Nice greenhouse in the most fashionable part of the city. Sell at a bargain. Cost to run it per month, including rent of $42.00, is $100.00. Receipts will average $300.00 per month, and can be increased. Good reasons for selling. Address
W. B. LEEDY & Co., Birmingham, Ala.

FOR SALE.

An old established florist business, containing about 10,000 feet of glass, four large grape and four plant houses in good order, heated with hot water, steam pump, tanks, etc. Property is free and clear. Terms easy: from 2 to 6 acres of land; 30 minutes from Grand Central Station, N. Y. City; 75 trains daily; 10 minutes from depot. This is a rare chance for the right party. For particulars apply to E. HUCKINS, Yonkers, N. Y.

FOR SALE.

The Oldest Seed and Florists' Stand in New Orleans

on account of retiring from store business, a large selected stock and good patronage from the best class of customers in the city. Address

R. E. SIMONS,
NEW ORLEANS, LA.

FOR SALE OR LEASE.

A BARGAIN.

One of the best paying florist's business in the west, for sale or lease on easy terms (see AMERICAN FLORIST of May 25th, page 1113). For full particulars address

HANS NIELSON, St. Joseph, Mo

FOR SALE.

We offer our greenhouses and label business for sale, including the land on which the greenhouses stand. For information, inquire at the office of

H. W. WILLIAMS & SONS,
BATAVIA, ILL.

ROSES FOR FORCING.

Florists desiring to plant the best stock would do well to carefully consider the following Rose offers. Our stock is clean, healthy and well grown, from 3-inch pots, and **THE PRICES ARE EXCEPTIONALLY LOW.**

MME. CAROLINE TESTOUT—$12.00 per 100, from 3-inch pots. We have 1500 plants left of this superb variety and make this low price to close them out. Plants from 2½-inch pots $10.00 per 100.

PIERRE GUILLOT.—From 3-inch pots $6.00 per 100.

CHRISTINE DE NOUE—The new red Forcing Rose. Strong plants from 3-inch pots $10.00 per 100.

THE BRIDE. **MME. CUSIN.**
CATHERINE MERMET. **PAPA GONTIER.**
3-inch pots, $6.00 per 100.

AMERICAN BEAUTY.—3-inch pots, $8.00 per 100; 2½-inch, potted May 1, $5.00 per 100.

ORDER NOW.

ROBERT SCOTT & SON,

19th and Catherine Sts., **Philadelphia, Pa.**

ROSES. ROSES.

Samples free on application.

Perles, Wootons, Mermets, White La France, Papa Gontier, Wabans, Souperts, Cusin, Pierre Guillot, Hermosa, Maurice Rouvier, Souv. De Clairveaux, Eva Stahrembergh, Malmaison, Souv. D'un Ami, Prof. Genivat.
2½-in. pots, $40.00 per 1000; $4.50 per 100.
Sunset, Wootton, Bride, Hoste, La France, Albany, Satrano.
2½-in. pots, $45 00 per 1000; $5.00 per 100.
Meteor, 2½-in. pots $6 00 per 100. Niphetos, James Wilson, 2½-in. pots $3 00 per 100.
Beauties, 2½-inch pots $8.00 per 100.
Sunsets, Woottons, Watteville, Bride, Hoste, in 3-in. pots, $8.00 per 100; $75.00 per 1000.
Bennetts, Beauties, Meteors, in 3-inch pots, $10 00 per 100.
Souperts, Cusins, in 3-inch pots, $7.00 per 100.

Our stock is all as fine as can be produced, clean and healthy. Samples mailed free on application.

L. L. MAY & CO.,

ST. PAUL, MINNESOTA.

FOR SALE OR TO RENT.

The following greenhouse property, situated on the outskirts of Springfield, the City of Houses; or will sell Greenhouses, Stock and Fixtures and give ten years' lease of 2 acres land. Ten houses in all—5 houses, 10 feet wide, 65 feet long; 4 houses, 18 feet wide, 65 feet long; 1 house, 18 feet wide, 65 feet long. Steam plant! New double Florida Boiler. Stock in good condition, with a large and extra good home market. This is an opportunity in a life-time, as present owner has other interests to look after. If you are looking for a chance, apply at once to

N. D. WINTER,
5 Elm Street, SPRINGFIELD, MASS.

TAKE YOUR CHOICE.

FOR SALE—An old established Florist Business at Dorchester, Mass., comprising 20,000 feet of land centrally located, on which are: 1 house 70x18 filled with Carnations; 1 house 70x16 filled with Roses; 1 house 70x11 filled with Violets; 1 house 70x10 filled with Violets; 1 sash pit 70x7 filled with Violets; 1 dwelling house 7 rooms. Plants in good condition and houses in good repair. Price $6,000.

FOR SALE OR RENT—A well equipped establishment within eight miles of Boston, comprising 8 acres of land on which are 1 house 120x20 filled with Mermets and Silver Sprays; 1 house 100x24 filled with Wilders and Plants; 1 house 100x11 filled with Wilders; 1 house 100x11 filled with Adiantums, 3-in. pots; 1 house 100x11 filled with Callas and Bouvardia; 1 house 100x11 filled with Callas, Bouvardia and Portia; 1 house 100x11 filled with Violets and Mignonette; 1 heated frame 100x6 filled with Mignonette; 1 propagating house 75 ft. long. Price $22,000.

FOR SALE—Eight miles from Boston. 1 acre of land, 8,000 feet of glass, including 4 houses, 100x18, 1 dwelling house 7 rooms. Apply to
N. F. McCarthy & CO. 1 Music Hall Place, Boston Mass.

NEW BEDDING BEGONIA

THURSTONII.

Strong plants, $1.00 per dozen; $6.00 per hundred.
J. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

WATTEVILLE,
METEORS,
BRIDESMAIDS
FRANK L. MOORE.
CHATHAM, NEW JERSEY.

ROSES.

TEAS . . . . . $30.00 per 1000
HYBRIDS . . . . . 40.00 per 1000
Healthy plants, in 2-inch pots
Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.
Trade list on application.

Jacob Schulz,
LOUISVILLE, KY.

ROSES.

Finest stock in Northwest

Duchess of Albany,	Mme. Hoste,
La France,	Niphetos,
Catherine Mermet,	Perle,
Waban,	Sunset,
The Bride,	W. F. Bennett

C. A. SMITH FLORAL CO.
77 7th Street, South, MINNEAPOLIS, MINN.
Mention American Florist.

WANTED.

5,000 American Beauty Plants. Stock must be young and fresh, from 2½-inch pots, not pot bound, delivered before July 1. Give me price on the lot or any portion of same.

O. P. BASSETT, Hinsdale, Ill.

What Rose is always in demand?
"AMERICAN BEAUTY."
Which is the only large Rose that can be had all the year round?
"AMERICAN BEAUTY."

WHAT NEW ROSE IS A FIT COMPANION TO BEAUTY?

"American Belle."

"AMERICAN BELLE"
has carried the highest honors wherever shown—New York, Boston, Chicago, Philadelphia, Cincinnati and elsewhere throughout the United States. . . .

$60 per 100; $400 per 1000. 25 at 100 rate, 250 at 1000 rate.

JOHN BURTON, Chestnut Hill, Philadelphia, Pa.

ROSES! ROSES! For FORCING.

	Per 100
American Beauty, magnificent plants, 2½-inch pots, $7 per 100; 3-inch	$10.00
Perle des Jardins, none finer, 2-inch, $4 per 100; 2½-in. $5 per 100; 3-inch	6.00
Meteor, elegant stuff for benching, 2½-inch $5; 3-inch	7.00
Mme. Watteville, good strong plants, 2½-in. $4; 3-in.	6 00
Mme. Cusin, 2½-inch $4; 3-inch	6.00
Niphetos, as fine as ever offered, 2½-in. $4; 3-in	6 00
Mermet and Bride, 2½-in	4.00
Papa Gontier, extra fine, 2½-in. $4; 3-in	6.00
Bridesmaid, unquestionably the coming pink rose; fine young 2½-in. stuff	8.00
Augustine Guinoiseau (White La France), splendid stock, 2½-in	5 00
Duchess of Albany, strong, 2½-in	4 00
Sunset, extra fine, 2½-in	4.00
Striped Malmaison, beautifully marbled, an exquisite variety, 2½-in	15.00

CARNATIONS.

Lizzie McGowan, splendid plants from flats or pots	4.00
Portia, fine pot plants	3.00
Edna Craig, the finest carnation extant, 2½-in	12.00
AMPELOPSIS VEITCHII, 3-inch pots	6.00
ASPARAGUS PLUMOSUS, 3-inch, strong	25.00
FUCHSIA Mrs. E. G. Hill. Buy plants now and stock up; the finest of all the double whites	6.00
IVY GERANIUM, Chas. Turner, the finest market variety without question	5.00
P. Crozy, brilliant scarlet, a cross between the Zonale and Ivy section, a gem for pot culture	8.00
50 Choice Zonales in 25 sorts, mostly new varieties, our selection, just the thing for stock, for $4 00.	

ORDER AT ONCE.

E. G. HILL & CO., Richmond, Ind.

ROSES.

We still can offer the following roses:

American Beauty, 2-in. @ 6c.; 3-in. 8c.
White La France, extra fine summer and winter bloomer, 2-in. @ 5c.; 3-in. 8c.
Bridesmaid, choice, 2½-in. pots $8 per 100
La France, 2-in. @ 4c.; 3-in. 6c.
Perles, 2-in. @ $4 per 100.

CHRYSANTHEMUMS for planting on benches or for single stem, in fine collections for **$4 00 per 100; $35 00 per 1000.** Best sorts only.

Address **NANZ & NEUNER,** LOUISVILLE, KY.

Mention American Florist.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST. . . . . .

ANCHORAGE ROSE CO., Anchorage, Ky.

DUCHESS OF ALBANY

AND OTHER FORCING ROSES.

Fine plants now ready for shifting to 3-inch pots. Send for list.

M. A. HUNT, Terre Haute, Ind.

ROSES.

PERLES, 2¼ inch, $5.00 per 100.
PERLES, 2¼ inch, $45.00 per 1,000.

JOHN BURTON,
Chestnut Hill, PHILADELPHIA, PA.

The New White Rose

KAISERIN AUGUSTA VICTORIA.

From 3-inch pots, $25.00 per 100.

JOHN COOK,
318 N. Charles St., BALTIMORE, MD.

Mention American Florist.

PERLE DES JARDINS.

A few thousand EXTRA FINE PLANTS, 3½-inch pots, $12.00 per 100.

JOHN H. TAYLOR,
Bayside, N. Y.

Mention American Florist.

FOR SALE.

Out of 4-inch pots.

Brides, Mermets, Bridesmaids, La France, Niphetos, American Beauties, Watteville's.

This stock is extra fine and cannot be beaten. Prices on application.

Holmedale Greenhouses,
P. O. Box 31. MADISON, N. J.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; 1inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

FLORAL ARRANGEMENT.

The project of an international contest in the artistic arrangement of flowers at the World's Fair in August meets with our hearty approval. The fact that the committee of the Commission on Classification entirely overlooked this now important department of the trade impresses us with the necessity of action that will open the eyes of the general public to its importance, and such a contest as has been suggested will do this most effectually. Further it will bring to the attention of the world the fact that the arrangement of flowers is truly an art and that those who practice it with really artistic results are entitled to rank with the painter and the sculptor.

If honor is due him who reproduces the beauties of nature upon his canvas by skillful blending of pigments, is not still more due to one who works with the pigments already blended by the mysterious forces of nature in tones that defy imitation by the hand of man? To be sure not every florist who arranges flowers can claim such distinction. There are florists who are artists in the true sense of the word and there are others who may be termed simply artisans. The artist can not be described. The term artisan may be applied to those who construct chairs, wagons, locomotives, etc. of flowers. Also to those who construct a cross with such rigid outlines that it is a cross and nothing else. In the hands of an artist the cross will be subordinated so that it is simply a suggestive foundation for decorative detail. And while we believe that a cross or other symbolic design of white carnations is permissible as an object *to decorate* we incline to the belief that Mr. Mathews gave us the proper dividing line when he said in effect that flowers should be used merely *to decorate with* and never to combine so as to depict any artificial object. In a word flowers are for decoration and not construction. This fact is thoroughly understood by the real artists among the professional arrangers of cut flowers, and the number of such is far greater than is generally credited to the trade. It should be the mission of the proposed contest to bring these artists together and show their work to the world. Let their work be seen by the half million or more of people who will visit the Exposition the third week of August—and let it be seen by the thousand or more members of the craft who will also be here at the same time. Give these last an opportunity to make a personal study of the work of the masters of the art, that their own conceptions of it may be broadened and elevated and the beneficial results be carried to every section of the land.

We earnestly believe that this trade is yet in its infancy. And that as refinement among the people increases (and the progress during the last decade has been marvelous) the field of the floral artist will broaden as few now dream. We believe the day will come when high artistic work in arrangement will receive the same recognition that is now accorded to artists in other fields, and that in the not distant future there will be masters of the art who will be able to command their own price for any work they may see fit to undertake. That there will be a host of people in the profession who will not advance beyond the present level is equally certain. There will be many of inferior ability just as there are among painters hosts of daubers who claim to be artists. But the possibilities for the arranger of cut flowers who can put real artistic feeling into his work will still be just as great as it is to-day for the painter who stands out above his fellows, and the general level of excellence is sure to be advanced. It will no longer be possible for the carpenter of last week to pose as a florist the next. And to attain a commanding position a course of study of the principles of art will be essential. The successful floral artist of the future will be a man of broad education and refinement who can associate on terms of equality with the people of culture with whom he will continually come in contact.

We are sure that the proposed contest will do much to hasten the coming of that day, if we fail not in making it what it ought to be.

PLEASE WRITE on your printed letter head when addressing our advertisers. If you have no printed letter head, then enclose your business card or bill head.

WHOLESALE FLORISTS

La Roche & Stahl

N. E. CORNER 13th & Chestnut Sts., PHILADELPHIA.

SAMUEL S. PENNOCK,
Wholesale Florist
REMOVED TO REAR OF 42 S. 16th ST., Philadelphia, Pa.

ORCHIDS.

I am handling the finest stock of Cut Orchids grown in this country and can supply them in any quantity. Also all other Choice Flowers.

T. J. CORBREY,
Wholesale and Commission Florist,
Consignments Solicited. 45 Lake St., CHICAGO.

BOUQUET GREEN, • • • • • • • HARDY CUT FERNS.
EVERYTHING GREEN
At H. E. HARTFORD'S,
18 Chapman Place. BOSTON.

Asparagus Plumosus Nanus.
CUT STRINGS: 6 to 10 feet long, 50 cents each. 12 to 18 feet long, $1.00 each.
In large or small quantities all the year round. The largest stock in the country.
W. H. ELLIOTT, Brighton, Mass.

Do You Use Ferns?
Finest and Cleanest in the Land.
Hardy Dagger Cut $1 per 1,000.
G. W. CURREY & CO.
Give us a trial. NASHVILLE, TENN.

Cut Blooms Carnations

	Per 100
Assorted, long stems	$1.00
White, long stems	1.25
White, short stems	.60

Address J. G. BURROW, Fishkill, N. Y.

E. H. HUNT,
WHOLESALE FLORIST

79 Lake Street, CHICAGO.

Decoration Day price list, taking effect May 27.

	Per 100
Perle, Gontier, Niphetos	$3.00@$4.00
Mermets, La France, Bride	4.00@ 5.00
Meteors	6.00
Carnations, short	1.00
" long	2.00
Valley, Tulips, Narcissus	2.00@ 3.00
Adiantum	1.00
Callas, Harrisii	8.00@12.00
Smilax	16.00@18.00
Peonias	6.00
Asparagus Plumosus	50.00
Jasmine	2.00@ 3.00

In effect till next issue of this paper.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,

34 & 36 RANDOLPH STREET,
CHICAGO, ILL.

WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in

FLORISTS' SUPPLIES,

126 Dearborn Street, CHICAGO.

Store Closes Nights 9 P. M.; Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.

WHOLESALE GROWERS OF

CUT FLOWERS of ALL KINDS

and Dealers in FLORISTS' SUPPLIES.

CHAS. W. McKELLAR, Mgr.

In Chicago Cut Flower Exchange,
45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,

66 WABASH AVENUE,

Telephone 4786. CHICAGO, ILL.

T. J. CORBREY,
Wholesale and Commission

FLORIST,

45 Lake St., CHICAGO, ILL.

In Chicago Cut Flower Exchange. . . .

A. G. PRINCE & CO.,
Wholesale and Commission

FLORISTS,

45 LAKE STREET,

In Chicago Cut Flower Exchange. CHICAGO.

DAN'L B. LONG,
COMMISSION • FLORIST,

495 Washington St., BUFFALO, N. Y.

FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST

4TH & WALNUT STREETS,
Cincinnati, O.

Wholesale Markets.

Cut Flowers.

NEW YORK, May 30.

Roses, Gontier, Perle, Niphetos	1.00@ 3.00
" Mermet, Bride, Hoste	2.00@ 4.00
" Cusin, Watteville, Meteor	1.00@ 3.00
" Bridesmaid, La France	5.00@ 6.00
" Jacquemmot, Testout	3.00@10.00
" Beauty, Hybrids, Moss buds	5.00@20.00
Carnations	.50@ 1.50
Valley	1.00@ 1.50
Longiflorum	3.00@ 6.00
Cattleyas	50.00
Mignonette	1.00@ 4.00
Sweet Peas, per bunch	.10@ .20
Adiantums	1.00
Smilax	15.00@25.00

BOSTON, May 30.

Roses, Niphetos, Gontier	3.00@ 5.00
" Perle, Sunset	4.00@ 6.00
" Bride, Mermet	5.00@ 8.00
" Jacq., Hybrids	10.00@20.00
Carnations	1.00@ 2.00
Longiflorum	8.00@10.00
Lily of the valley	1.00@ 2.00
Poeticus	.50@ 1.00
Pansies	.25
Lilac	2.00
Adiantum	1.00
Smilax	15.00@25.00
Asparagus plumosus	50.00@100.00

PHILADELPHIA, May 30.

Roses, Brunners	15.00@25.00
" Lainps	15.00@20.00
" Beauties	15.00@25.00
" Belles	25.00
" La France	3.00@ 4.00
" Mermet, Bride	4.00@ 5.00
" Cusin, Watteville	3.00@ 4.00
" Jacqs	8.00@10.00
" Perle, Gontier	2.00@ 3.00
Valley	1.50@ 2.00
Carnations	.75@ 1.50
Mignonette	1.00@ 2.00
Asparagus	30.00@75.00
Smilax	20.00@25.00
Adiantum	1.00@ 1.25
Harrisii	5.00@ 6.00
Callas	5.00@ 8.00
Sweet peas	1.00@ 2.00
Cypripedium Lawrenceanum	.15

CHICAGO, May 30.

Roses, Perles, Niphetos Gontier	3.00@ 4.00
" Mermet, La France, Albany	4.00@ 5.00
" Brides, Wootton, Bennett	4.00@ 5.00
" Beauties	10.00@15.00
" Meteors	6.00
" Jacqs	12.00@18.00
" Hybrids	12.00@18.00
Carnations (short)	.75@ 1.00
" (long)	1.50@ 2.00
" (fancy)	2.00@ 2.50
Callas, Harrisii	8.00@12.00
Auratum	12.00@15.00
Gladiolus	10.00@15.00
Romans, Valley	3.00
Violets	1.00
Sweet Peas	1.00@ 1.50
Peonies	6.00@10.00
Daffodils, tulips	3.00@ 4.00
Cape Jasmine	2.00@ 3.00
Smilax	16.00@18.00
Adiantum	1.00
Asparagus	50.00

Peck & Sutherland,
Successors to WM. J. STEWART,

Cut Flowers AND Florists' Supplies

WHOLESALE.

67 Bromfield Street, BOSTON, MASS.

WHOLESALE FLORISTS,
JOBBERS IN . . .
. . FLORISTS' SUPPLIES,
FLORISTS' VASES.

METS,
BRIDES,
GONTIERS,
CARNATIONS,
ALWAYS ON HAND.

1 Music Hall Place,
BOSTON, MASS.

HORTICULTURAL AUCTIONEERS. . .
Mention American Florist.

WELCH BROS.,
Wholesale Florists,

NO. 2 BEACON STREET,

Near Tremont St., BOSTON, MASS.

BURNS & RAYNOR,
49 West 28th Street,

NEW YORK,

WHOLESALE DEALERS IN AND SHIPPERS OF

Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE

FLORIST,

32 West 30th Street, NEW YORK.

Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN

CUT FLOWERS

51 W. 30th St., NEW YORK.

FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,

117 W. 30TH ST., NEW YORK.

The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE

FLORIST,

111 WEST 30TH STREET,
NEW YORK CITY.

Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,

5 WEST 27TH STREET,

NEW YORK.

BRANCH: Cut Fower Exchange, 408 E. 34th Street

MICHAEL A. HART,
Wholesale AND Commission Florist

113 WEST 30TH STREET,

. . . NEW YORK.

The finest Roses, Violets and Carnations

Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,

Wholesale Florist

Careful Shipping to all parts of the country.
Price list on application.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),

WHOLESALE

FLORIST,

1122 PINE STREET,
St. Louis, Mo.

A complete line of Wire Designs.

W. ELLISON,
WHOLESALE

Cut Flowers AND Florists' Supplies

1402 PINE STEET,

St. Louis, Mo.

The Seed Trade

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1893. Applications for membership should be addressed to Wm. Meggatt, chairman membership committee, Wethersfield Conn.

Turnip Seed.

ED. AM. FLORIST.—My remarks on the turnip seed crop, originally written nearly two months ago, were in advance of the general information on the subject, notwithstanding what your correspondent from Minnesota may say to the contrary; of course he may have been possessed of this knowledge long ago, as he was on the onion seed market (?), but my remarks were intended for such of your subscribers as usually wait until June to contract for their turnip seed, and as already there has been an advance in price since my prediction, I trust some of your subscribers have have been benefitted, by placing their orders before now.

Strange as it may seem, nevertheless it is true, that the seed trade of this country as a usual thing never take into consideration the general failure of a special crop until the season for the sale and planting thereof is near at hand, and then all jump for it at once; if a little more care and attention were given to such subjects they would all most likely be wealthy enough to avail themselves of such bargains, be it onion, turnip or any other scarce varieties.

I am only surprised that the gentleman from Minnesota did not avail himself of the same opportunities while in France last year that the Quaker City firms did.

ROBERT BUIST, JR.

Philadelphia, May 26, '93.

PAY DAY, the crucial time in the seed trade, June 1, is at hand.

THE PROGRAM for the annual meeting of the Seed Trade Association will soon be ready.

F. L. POSSON & SON, seedsmen, Portland, Oregon, are reported burned out May 27.

MR. JAMES COMONT succeeds Mr. S. Y. Haines in J. C. Vaughan's New York store. Mr. Comont has had charge of the bulb and foreign business of the house for some time.

GRAND RAPIDS, MICH.—A gas explosion in the seed warehouse of W. T. Lamorceaux, 128 and 132 West Bridge St. set the building on fire May 21. A considerable amount of damage was caused by both fire and water; fully insured.

Change in Maritime Law.

"An act relating to navigation of vessels, bills of lading and to certain obligations, duties, and rights in connection with the carriage of property," was approved by the President on February 13, 1893, and is to go into effect on July 1, 1893.

Good authorities claim that this act will change almost entirely all rights and liabilities of vessel owners and of all persons who have property on vessels and of passengers on same. Importers and those heavily interested will do well to procure a copy of the act.

BLOOMINGTON, ILL.—W. T. Hempstead is building a new house 18x50 with short span to the south.

LOUIS BOEHMER. ALFRED UNGER.

Extract of Wholesale Catalogue 1893-'94.

L. BOEHMER & CO.,

4, 5 & 28 Bluff, Yokohama, Japan.

	Per 1000	
Lilium Auratum, 5 to 7 inches in circumference	$ 15.00	silver
" " 7 to 9 " "	18 00	"
" " 9 to 11 " "	30.00	"
" " 11 to 13 " "	50.00	"
" " rubro vittatum, 6 to 7 inches	250.00	"
" " " " 7 to 9 inches	275.00	"
" " macranthum (magnificent large flower) 7 to 9 inches	50.00	"
" " " 9 to 12 inches	120.00	"
" Longiflorum eximium, 4 to 6 inches	15 00	"
" " " 6 to 8 "	20.00	"
" " " 8 to 10 "	30.00	"
Iris Kæmpferi, strong clumps, best selected, 100 varieties	75.00	"
Nerine Japonica, the pink Japanese Spider Lily	30.00	"
Pæonia Arborea, 100 best varieties, double and half double	300.00	"
" Herbacea, new varieties	250.00	"
" " common varieties	150.00	"

Season begins in August. **Send orders early therefore. PRICES ARE FREE ON BOARD IN YOKOHAMA.** 100 gold dollars are about $145.00 silver. **Freight** to all United States points per Northern Pacific Railroad Co., 1½ cents gold per pound to San Francisco. $8 to $10 gold per ton, 40 cubic feet measurement.

PAYMENT. Orders sent direct to us must be accompanied by a remittance (bankers draft or other usual credit) to the full value. If freight is to be prepaid the remittance should cover that cost also. Our bankers are the Hong Kong and Shanghai Banking Corporation. Agencies: San Francisco and New York. Please write for Catalogues. We are the **oldest** and only European firm in the country, established 1882. The most of Japanese novelties were introduced by us.

CYCAS REVOLUTA, the true long leaved variety, stems from 6 inches to 4 feet, are collected by Mr. A. Unger every year. 1000 pounds. fronds and roots cut off, $50.00 silver. Please send your orders before November.

CABLE ADDRESS: **BOEHMER, YOKOHAMA.**

We Grow.....

BULBS

SEGERS & CO., BULB GROWERS,

LISSE near HAARLEM, HOLLAND.

Catalogues will be mailed free upon application if not received.

FOR SALE.

THE CUTS

USED IN ILLUSTRATING THIS PAPER.

Write for prices on any which you have seen in previous issues and would like.

AMERICAN FLORIST CO.

CHICAGO.

Choice Lily of the Valley Pips.

Ernst Reimschneider, Altona, Hamburg.

For Fall Importation. Catalogues free on application to his sole agents.

C. C. ABEL & CO., P. O. Box 920. New York.

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

LILIUM HARRISII.

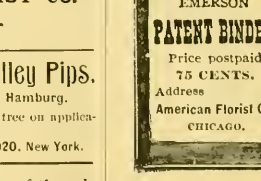
Original and largest growers of this important bulb.

OUR SPECIALTY!

True Stock. Lowest Prices. Best Quality.

F. R. PIERSON CO.,

TARRYTOWN-ON-HUDSON, NEW YORK.



THE GREAT ANTIPEST.

For particulars, see next week.

R. W. CARMAN, GEN'L AGT.,

291 Amity Street, FLUSHING, Queens Co., N. Y.

HYACINTHS, TULIPS,

DAFFODILS, NARCISSUS, LILIES,

And all other bulbs for forcing and outdoor, in very fine quality, at reasonable rates.

If any of our friends have not received a copy of our Catalogue of 1893, should write for one at once.

Please DO NOT DELAY ordering.

SEGERS BROTHERS,

WHOLESALE BULB GROWERS,

LISSE, near Haarlem, **HOLLAND.**

HULSEBOSCH BROS.,

BULB AND PLANT GROWERS,

OVERVEEN, near Haarlem, HOLLAND.

	Per 100	1000
Lilium Harrisii, 4 to 5-inch in circ.	$2.20	$19.00
" " 5 to 7-inch in circ.	3.00	24.00
" " 7 to 9-inch in circ.	5.25	47.00
" " 9 to 12-inch in circ.	11.00	100.00
Lilium Longiflorum 10 per cent dearer than Lilium Harrisii.		
Roman Hyacinths, extra selected	2.50	22.00
" " top roots	3.00	25.00
Narcis. Totus Albus, extra selected	1.00	7.50
" " " Grandiflorum, ext. s'le'd	1.30	11.00

Fall Wholesale Catalogue now ready. Address

A. HULSEBOSCH,

P. O. Box 3118. Warehouse 58 West Street,

NEW YORK CITY.

Mention American Florist.

BENJAMIN RIMBAUD, BULB GROWER,

Quartier du Temple, Toulon, var, France.

Cable address **Benrimbaud, Toulon.**

The largest cultures in the South of France, of **WHITE ROMAN HYACINTHS,** Narcissus Paper White grandiflora, N. Double Roman, N. **Double Von Sion,** true pure yellow, and other Daffodils. **Lilium Candidum,** the largest bulbs. Freesias. Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A. Double Rosette the earliest, etc. Prices on application.

Mention American Florist

TUBEROSES.

☞ We are headquarters.

	Per 100.	Per 1,000
1st size Dwarf Pearl	$1 50	$12 00
2d size	80	6 50
1st size Tall Pearl	1 20	10 00
Gladioli, extra large, finest sorts	1 25	12 00

H. G. FAUST & CO.,

64 and 66 N. Front St., PHILADELPHIA, PA.

WOODLAWN FARMS, 1,300 ACRES.

Lily of the Valley Bulbs.

THE STAR BRAND

SPECIALLY RECOMMENDED FOR LATE FORCING.

We are now booking import orders for shipment from Hamburg in October or November.

REISS & BRADY,

280 Washington Street, New York.

GT. VAN WAVEREN & KRUYFF,

BULB GROWERS,

SASSENHEIM, Haarlem, HOLLAND.

ESTABLISHED 1866.

Mr. G. Kruyff has finished his trip through the United States and will sail for Europe on June 10 next. In order to avoid the delay caused by writing to our firm in Holland parties wanting estimates, information, etc., are invited to correspond before June 9 with

Gerard Kruyff,

ASHLAND HOUSE, FOURTH AVE., NEW YORK CITY.

R. VAN DER SCHOOT & SON,

HILLEGOM, - HOLLAND,

Largest Growers of

HYACINTHS, TULIPS, NARCISSUS, SPIRÆA, LILIES OF THE VALLEY, ETC.

HEADQUARTERS FOR HIGH GRADE FORCING BULBS.

Wholesale Importers should write us for Prices.

OUR NEW TRADE LIST NOW READY.

Choice Dutch Bulbs

AND NEW VARIETIES OF ATTRACTIVE BULBOUS PLANTS, GROWN BY

C. G. VAN TUBERGEN, JR.,

Haarlem, Holland.

For Fall Importation, catalogues free on application to his sole agents

□ C. C. ABEL & CO., P. O. Box 929, New York.

We Sell Bulbs!

Special Prices on Application.

Weeber & Don

Seed Merchants and Growers,

114 Chambers St., NEW YORK.

Fresh From Japan.

Sound Bulbs of

Lil. Auratum, 7 to 9 inch, $9.00 per 100.

Lil. Rubrum, 7 to 9 inch, $9.00 per 100.

Import prices on first class Fall Bulbs way down.

W. W. BARNARD & CO.,

6 and 8 N. Clark St. CHICAGO.

G. J. MOFFATT,

Manufacturer of

PAPER BAGS AND ENVELOPES

Special attention given to

Seed Bags and Catalogue Envelopes.

NEW HAVEN, CONN.

Mention American Florist.

St. Louis.

Trade during the past week has been very slow, stuff having come in much faster than demand warranted. Although really good stock is scarce, carnations are as plentiful as the balance; in fact there being a surplus of everything. It is expected that the school commencements in June will lend a healthier tone to the market. The shortened supply, owing to replanting, will also add firmness, so that the outlook for the coming month is quite favorable.

Pæonies have been in the market for some time and seem to be quite well received by the buyers, the demand having remained steady since their first appearance. This is a flower that can be grown cheaply and will always be in demand. The single varieties, although not desirable for cut flowers, are most beautiful on the plant. The show of them at the cemeteries, where they have been extensively planted, is worth seeing.

The bulbs have all been removed from the flower beds at Forest Park and the beds planted with the bedding stuff that will remain during the summer. It has not been very long since bedding was introduced into Forest Park, but from appearances it has come to stay, the advance from year to year being very noticeable. Last year three houses were erected by the city in the southern end, from which all the stock used this season has come. The lily ponds have all been repaired and planted and promise to be as interesting as formerly. It seems strange how fascinating they are to the general public, as they seem to attract much more attention than the plants bedded out.

The Bowling Club met Wednesday evening as usual and indulged in considerable friendly discussion regarding the qualification for membership, some wanting none but practical florists and members of the Florists' Club to be admitted; others still say do not make a membership in the club necessary, as it comes rather high to join both bodies at once, and also as there may be parties wishing to join the Bowling Club who do not desire to be members of the Florists' Club; a third says as the Bowling Club is a purely social affair, admit all florists and parties willing to join and keep dues paid, that is, provided they are desirable. The matter was finally laid over and five new members admitted, subject to the qualifications to be adopted. The meeting then adjourned to the alleys, where scores of 209, 190, 168, 154 were made, showing vast improvement over the former meeting. The finger balls have not as yet materialized and all feel that they are playing under somewhat of a disadvantage.

R. F. T.

Trade Directory Supplement.

The correction sheet for the American Florist Co.'s Directory of 1892 has been mailed to all buyers of the book whose names and addresses are on record. Those who purchased the book through an agent can secure a copy of the supplement without charge by addressing either 322 Dearborn street, Chicago, or 67 Bromfield street, Boston.

BALTIMORE.—The Schley & Collins Co., organized to conduct a florist business, has been incorporated with a capital stock of $5,000. The incorporators are Wm. A. Collins, John E. Schley, George Schley, Sr., George Schley, Jr., and Henry C. Weber.

ROSES.

MME. CAROLINE TESTOUT—The beautiful new hybrid Tea Rose, $25.00 per 100; $200.00 per 1,000,

HEINRICH SCHULTHEIS—An excellent pink hybrid Remontant Rose for very early forcing, $7.00 per 100; $60,00 per 1,000.

Chrysanthemums.

MRS. CRAIG LIPPINCOTT—Awarded a silver medal at Philadelphia, November, 1892. Yellow in color, VERY EARLY; large flower, broad petals. $3.00 per dozen.

TUXEDO—A beautiful orange colored flower, the best of this color for cut flowers. This should be grown in large quantities, so that the admirers of the Princeton College boys can get a color to their taste. $1.50 per dozen; $10.00 per 100.

EDWIN LONSDALE,

CHESTNUT HILL P. O. PHILADELPHIA PA.

Carnations All Sold

We still have some Fine Plants of

The Best Yellow Cann. **NELLIE BOWDEN,** 75c each. $8.00 per dozen

JOHN McGOWAN, - - Orange, N. J.

FIELD GROWN CARNATIONS.

50,000 Ready in the Fall.

W. R. SHELMIRE,

CHESTER CO., AVONDALE, PA.

Correspondence Solicited.

CARNATIONS.

A SPECIALTY.

Full stock of all the new and leading varieties. Rooted Cuttings, Young Plants, and Field Grown Plants in season. Get our prices before purchasing.

GEO. HANCOCK,
GRAND HAVEN, MICH.

Mention American Florist.

WISCONSIN FLOWER EXCHANGE,

131 Mason St., MILWAUKEE,

WHOLESALE

Cut Flowers AND Florists' Supplies,

BULBS, ETC.

JULIUS TESMER & CO.

Manufacturers of all kinds of

Ice Boxes

AND STORE FIXTURES,

343 N. Western Ave., CHICAGO.

GERANIUMS.

LILLIAN SMITH, best single scarlet.
DOUBLE GEN. GRANT (Brunnt), best double scarlet, out of 4, 4½ and 5-inch pots, $8.00 to $10.00 per hundred.
COLEUS and ALTERNANTHERA, large assortment, $3.00 per hundred. Cash with order.

S. J. REUTER, Westerly R. I.

GREENHOUSE HEATING.

BY A. B. FOWLER.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.

It is highly commended by Mr. John Thorpe and others. Postpaid, 75c.

Sent on receipt of price. Address,

AMERICAN FLORIST,
CHICAGO.

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

GRACE BATTLES

and over 60 other varieties of

CARNATIONS

offered the Wholesale Trade.

My list embraces the best Standard and New kinds, including some of particular interest to growers of seedlings. Correspondence and personal inspection solicited.

C. J. PENNOCK,
The Pines. Kennett Square, Chester Co., Pa.

ROOTED CUTTINGS

Of the Best Old and Most Promising new varieties of

CARNATIONS.

Write for a catalogue and send list of wants for an estimate.

J. J. Styer,
CONCORDVILLE, PA.

ROOTED CUTTINGS of CARNATIONS

By the Wholesale.

Ready now. This is the best time for intending buyers to supply themselves. offer them at moderate prices. Send for Price List. Address

JOSEPH RENARD, Unionville, Chester Co., Pa.

COLEUS.

Standard Sorts, $2 25 per 100; $20 per 1000.

My Specialty: Golden Bedder and Verschaffelt. $2.50 per 100; $22.50 per 1,000; 2½ inch pots; ready now. Any quantity. Cash with order.

C. F. FAIRFIELD
SPRINGFIELD, MASS.

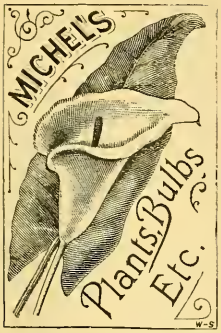
PANSIES.

Fine young plants. White, in bloom at $1.75 per 100.

James Frost,

DARKE CO., GREENVILLE, OHIO.

When writing to any of the advertisers on this page please mention the American Florist.



Write for Wholesale List.

MICHEL PLANT AND BULB CO.,
ST. LOUIS, MO.

Siebrecht & Wadley,

ROSE HILL NURSERIES,

NEW ROCHELLE, N. Y.

Palms,
ORCHIDS
Roses,
and New Plants.

FRESH DRACAENA CANES NOW READY.

ORCHIDS.

The Finest Stock in the World.

SANDER'S,
ST. ALBANS,
ENGLAND.

Thirty minutes from London.

Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City.

Orchids Cheap as Good Roses.

BRACKENRIDGE & CO.,

Established 1864. **Govanstown, Md.**

PRICE LIST FREE.

1,000,000 CANE STAKES

SAMUEL HENSHAW,
LANDSCAPE GARDENER,

West New Brighton, N. Y.

Arrangement and planting of grounds. Advice given in remodeling old places. Plans and estimates on application.

Surplus Stock.

A large lot of the leading sorts of Coleus, including large fine plants of Golden Bedder, and about 25 other sorts, at $2.25 per 100. Hardy Scarlet Salvia 60 cents a dozen. Heliotropes 50 cents a dozen. Sweet Alyssum 40 cents a dozen. Dusty Miller $4.00 a 100. Florists' Pinks, double white and pink, $4.00 a 100. Pansies, large plants, $2.00 a 100. Also other bedding plants.

M. TRITSCHLER, Nashville, Tenn.

Cycas Revoluta

The Largest and Best Selected Stock of Cycas Revoluta, fronds and roots cut off, true long leaved variety, now on hand.

For general Japanese and Australian stock, apply to

F. GONZALEZ & CO.,

303-312 Wayne St., SAN FRANCISCO, CAL.

☞ Send for catalogue

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

The three leading Florist Flowers:

CHRYSANTHEMUMS,
CARNATIONS
AND ROSES.

ALL THE NEW AND SELECTED STANDARD VARIETIES. . . .

My stock of all are as fine as can be produced at reasonable rates.
Complete list of these will be mailed to all applicants in the trade.

JOHN N. MAY, Summit, N. J.

CANNA EXPLORATEUR CRAMPBEL

Flower as large as BOUVIER; color a clear vermilion scarlet, tinted with crimson spots distributed evenly over the petals. Flower spikes large. We claim it to be the largest and most showy deep red flower of all the new Crozy kinds. **Per dozen, $6.00; per 100, $40 00.**

ALPHONSE BOUVIER and J. D. CABOS, per dozen, $4.00.
FLORENCE VAUGHAN, the sensation of the year, each, $2.50.

J. C. VAUGHAN

NEW YORK: 26 BARCLAY STREET. CHICAGO: P. O. BOX 688.

HOW TO GROW CUT FLOWERS.

A PRACTICAL TREATISE ON

THE CULTIVATION OF THE ROSE,

And Other Flowering Plants for **Cut Flowers**, sent to any address upon receipt of **$2.00.** M. A. HUNT, Terre Haute, Ind.

IMPORTED ORCHIDS.

Cattleya Mossiæ just arrived in splendid condition. **East Indian Orchids** have arrived. Among them will be a grand lot of **Vanda Cœrulea, Cypripedium Insigne**, collected in the original district from which all the choicest varieties have come, **Cymbidium Eburneum, C. Mastersii, C. Devonianum, C. Giganteum.** Also **Dendrobium Nobile, D. Farmersii, D. Chrysotoxum, D. Thyrsiflorum, D. Aureum, D. Densiflorum, D. Devonianum, D. Cambridgeanum** and other **Dendrobes**, together with a small lot of **Phajus Wallichii** and **Pleiones.** Prices of the above on application.

Of **Established Orchids** a fine selected stock of **Cattleya Trianæ**, well established in 6-inch pots and will produce four to eight flowers each next winter. Many very choice varieties will be found among them. Single plants $2.50; 12 for $25.00; 100 for $175.00. Terms sixty days to buyers with satisfactory references, or 5 per cent discount for cash.

IG. FORSTERMAN, NEWTOWN, N. Y.

PLANTS.

Alternanthera, Versicolor, Tricolor and Aurea Nana	per 100	$2.50
Alternanthera Paronychioides	"	3.00
Coleus, best old and new (200 for $5.00)	"	5.00
Fuchsia Trailing Queen	per doz.	.50
Begonia assorted	per 100	$4.00
Mexican Primroses, 3 varieties	"	3.00
Fuchsia, best varieties	"	3.00
" Storm King and Phenomenal	"	4.00
Echeveria Glauca	"	3 & 4.00
" Extensa Globosa, for centers, plants six inches across	each.	.25

Price List on Application

ROBT. S. BROWN & SONS,

Box 99, Kansas City, Mo.

Cyclamens.

	Doz.	Hundred.
Select strains, in 3½-in pots	$1.00	$8.00
H. P. Roses, Select named kinds	1.50	10.00
Smilax, stocky, well-hardened Seedlings, per thousand,	6.00	.75

F. A. BALLER,
BLOOMINGTON, ILL.

WORLD'S FAIR ACCOMMODATIONS

Members of the trade visiting Chicago during the World's Fair can find good, clean lodgings within short distance of World's Fair entrance at one dollar per day. Address manager

CHICAGO CUT FLOWER EXCHANGE
45 LAKE STREET.

ROSES,

CARNATIONS AND VIOLETS

STRONG PLANTS,

WRITE FOR PRICES.

Kemble Floral Co.,
OSKALOOSA, IOWA.

TRY **DREER'S GARDEN SEEDS,**

Plants, Bulbs & Requisites. They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.

HENRY A. DREER, Philadelphia, Pa.

CHRYSANTHEMUMS.

2½ inch, $4 per 100.

SMILAX—1st class, from 2½ inch pots, $2.50 per 100; $20.00 per 1,000. Samples free.

Address **J. G. Burrow,**
FISHKILL, N. Y.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

Low Prices in Cleveland.

I sincerely sympathize with A. H. G. It is time that some of our florists should feel the effect of low prices, and I intend they shall. What do you think of a man selling Mermets and Brides at $2.50 per dozen at Christmas, when he pays $20 per 100 for them? Do you think anyone can compete with him? And American Beauties at $6 per dozen at the same season! If a lady buys six carnations she is given asparagus or some other green with them without charge, and this man is obliged to buy everything he sells. We are willing to give anyone a start and if they are obliged to sell a little lower in order to obtain a foothold we would say nothing about it, but after two years of this sort of work we feel obliged to come down to his level. We are tired hearing customers say, we can buy lower of so and so, and walk off. We intend to sell to them at any price, and the hospitals will have to do with less flowers.

We think there ought to be some sort of a standard in prices for first-class stock. Perisbable goods, like flowers, can't be sold on small margins; the losses are too great and experienced help too expensive. We have 120,000 feet of glass, grow all, or most all, of the flowers we sell, and think we are able to compete with anyone who buys his stock. We would like the opinions of some of the first-class florists on this subject.

G. M. J.

[As prices are governed largely by local conditions we would suggest that the florists of Cleveland have an old fashioned "town-meeting" and there discuss the whole matter in a friendly way. Such a meeting conducted on a broad basis, confining the discussion to methods and excluding all personal references, will accomplish more good than any other means. We suggest that A. H. G. and the writer of the above communication jointly sign a call for such a meeting, adding the signatures of such other members of the trade as may be readily obtained, that the call be mailed to every florist in Cleveland and vicinity and that the meeting be held in some public place, and not at the place of business of anyone in the trade. Let the problems that are to be discussed be reduced to writing and read by the secretary of the meeting. Arbitration is the order of the day and it is vastly less expensive than war. If the condition of affairs noted exists in other cities, the above prescription is good for all. Don't pass this suggestion over with an observation to the effect that discussion will be wasted on the "other fellows." There may be a few hopeless ones in your locality, but one or two bats don't make a night, and a majority can accomplish a great deal of good. And don't condemn the majority if they fail to see things exactly as you do. As a rule the views of the majority are correct, and are certainly less liable to be wrong than those of the individual. Perfection is unattainable, but it is approachable, and, as the the old saying has it, "Half a loaf is better than no bread."—ED.]

GERANIUMS.

Fine plants and varieties, 4 inch pots, per 100, $7 50.

Tuberous Begonias, per 100, $3 00 and $2.50. Should be ordered now.

BRAUER & RICHTER,
McCONNELSVILLE, OHIO.

Mention the American Florist when writing to advertisers on this page.

COMMENCEMENT BASKETS.

FOR THE SCHOOL GRADUATE.

There is no present so fitting and appropriate in every way as a handle basket filled with choice flowers.

You can convince your customers of this if you only have a good line of suitable baskets on hand to show. In fact our baskets will sell themselves. If you are wise you will place an order at once. Select from our wholesale list which we mail on application, or leave it to our judgement to select you an assortment. Your order will be filled promptly from fresh stock and at bottom prices.

On Wheat Sheaves, Immortelles, Metal Wreaths and all lines of Florists' Supplies we can please you. Send for our reduced price list.

H. BAYERSDORFER & CO.,
WHOLESALE ONLY. 56 N. 4TH ST., PHILADELPHIA, PA.

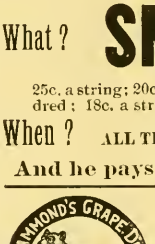
THE SMILAX KING!

Who? **KOFFMAN,**
Where? WALDEN, Orange Co., N. Y.
What? **SMILAX**

25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.

When? ALL THE YEAR AROUND.

And he pays the Express.



Kills Mildew and Fungus Growth. What does? **GRAPE DUST.**

Sold by Seedsmen.

WHITE DOVES

FOR FLORISTS.

Largest and finest stock in the United States. Write for prices to

S. J. RUSSELL.
850 Montgomery St., Jersey City, N. J.

TRADE MARKS COPYRIGHTS.

SOLICITOR OF U. S. AND FOREIGN PATENTS.
Atlantic Building, Washington, D. C.
(Send sketch or model for free examination as to patentability.)

MRS. THEODOSIA B. SHEPHERD,

VENTURA-BY-THE-SEA, CAL.,

GROWS PLANTS, BULBS, SEEDS AND CACTI FOR THE TRADE.

Fresh Smilax Seed, $3.50 per lb. Special rates on quantities. Calla Lilies in August.

Strong dormant roots of Poinsettias now ready. Largest size, $2 per doz.; 2nd size, $1.35 per doz.; $8 per 100, delivered.

French Cannas—Ventura, $15 per 100, delivered. Mme. Crozy, Pres. Carnot, Star of '89, Doyen Sisley, Geoffrey St. Hilaire, etc. $11 per 100. Older varieties, $6 per 100, delivered.

Freesia Bulbs, strong, July, $3.50 per 1000; medium, $2.25 per 1000. Cash with orders.

Cosmos, Cobea Scandens, Eckford's Sweet Peas, French Cannas and other seeds supplied in large quantities. Send for retail catalogue and wholesale list.

Cape Flowers, new crop in best white quality at $1.00 the lb.; 10 lb. lots, $9 net.

Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 28-in. upwards, at 40c., 45c., 50c., 60c., 75c. and $1.00 each, according to length.

Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.

Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.

Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc. For prices consult our

Trade Catalogue, mailed free.

August Rölker & Sons,
136 & 138 W. 24th St., P. O. Station E. New York.

IF YOU NEED ANY

Cape Flowers, Immortelles, Grasses, plain or fancy **Baskets, Metal Wreaths, Letters, Doves,** or any other thing in the Florists' supply line, mail us your order.

REMEMBER WE ARE THE

Leading Manufacturers of Wheat Sheaves and Baskets, and Importers of **Florists' Supplies.**

Catalogue on application.

ERNEST KAUFMANN & CO.,
113 N. 4th Street, PHILADELPHIA, PA.

MARSCHUETZ & CO.,

Florists' Supplies,

23 & 25 N. 4th St., PHILADELPHIA, PA.
Send for Catalogue.

SEND FOR A COPY
—OF OUR—
TRADE DIRECTORY

AMERICAN FLORIST CO., CHICAGO

AMPELOPSIS VEITCHII.

All sizes from $5.00 to $15.00 per 100. Large size, from 4-inch pots. Stock true and well grown, no seedlings are among them. We always ship f. o. b. New York City. Orders taken now for Summer delivery.

LANGAN BROS., 921 Crescent Street, ASTORIA, L. I., N. Y.

Special Offer

FOR THE NEXT THIRTY DAYS.

LATANIA BORBONICA.
5-inch pots, strong, per doz., $9.00,
4-inch " " " $6.00.
3-inch " " " $2.00; per 100, $15.00.
2½-inch pots, strong, per doz , $1.00; per 100, $8.00.

PANDANUS UTILIS.
5-inch pots, extra strong, per doz., $6.00.
4-inch " " " " $4.00.
3-inch " " " " $2.00.

ARECA LUTESCENS, 2½-in. pots per 100 $10.

ASPARAGUS TENUISSIMUS.
3-in. pots, per doz , $1.00; per 100, $8.00.
2½-in. pots, per doz., 50c; per 100, $4.00.

CYPERUS ALTERNIFOLIUS.
4-inch pots, per doz., $1.25.
3-inch pots, per doz., 75c.
2-inch pots, per doz., 50c.

Address **NATHAN SMITH & SON,**
167 W. Maumee St.,
ADRIAN, MICH.

Alternanthera Aurea Nana.

Per 100.....$ 2.50
Per 250..... 5 00
Per 1000..... 20 00

NATHAN SMITH & SON,
167 W. Maumee St., ADRIAN, MICH.

HEADQUARTERS for WATER LILIES

Now is the time to plant all tender and tropical varieties without risk and loss. Secure your stock early. Prices moderate. Send for Catalogue.

WM. TRICKER. DONGAN HILLS, NEW YORK.

6,000 Alternanthera paronychioides major and aurea, at $3.00 per 100.
6,000 Echeveria glauca, 2½ to 3-inches in diameter, $5.00 per 100; $25.00 per 1000.
3,000 English Ivies, 3 to 4 feet high, from 3½-inch pots, $5.00 per 100.
5,000 Smilax, from 2-inch pots, $2.00 per 100.
5,000 Mountain Daisies, red and white, $2.50 per 100.
Coleus Golden Bedder and Verschaffeltii, from 2½-inch pots, $3.00 per 100; from 3½-inch pots, $4.00 per 100.

JOHN RECK, BRIDGEPORT, CONN.

100,000 SMILAX PLANTS.

From 2-inch pots, for June delivery, at $2 per 100; $15 per 1000. Terms strictly cash. Orders booked now. Address

FRED SCHNEIDER, Wholesale Florist,
WYOMING CO., ATTICA, N. Y.

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

COLEUS.

PLANTS FROM 2¼ AND 2-INCH POTS,
$1.75 PER HUNDRED; $15.00 PER THOUSAND.

Golden Bedder, Verschaffeltii, Hero, Golden Verschaffeltii, Yeddo, Firebrand, Fire Crest, J. Goode, Chapmani, Chicago Bedder.

Have above varieties ready for immediate delivery, in large quantities—and if order cannot be filled, will notify by wire.

Surplus Geraniums.

First-class plants, in bud and flower. From five and six-inch pots.

100 LA FAYETTE,
25 BUFFALO BILL,
75 MONTESQUIEU,
25 M. CAN,
50 JEAN D'ARC,
25 S. G. COBB,
50 W. A. CHALFONT,
25 COMTE DE BLACAS,

25 COPERNIC,
50 SOUV. DE MIRANDE,
25 M. JOVIS,
50 MRS. E. G. HILL,
$1.75 per dozen; $10.00 per 100.

50 MADONNA,
75 MRS. J. M. GOAR,
$2.25 per dozen; $15.00 per 100.

100 LA FAVORITE, $8.00 per 100.

CASH WITH ORDER. **S. B. FIELD, Roselle, N. J.**

SMILAX.

Good, stocky little plants once reset, they can be packed very light and are cheap of transportation, cheap in price and not dear at the end. A sample will cost only 10 cts and convince you. **Price, per 100 75 cts.; per 1000 $6.00.**

Watch for my pansy ad. soon, it will have some new facts.

TERMS CASH

L. B. 496. ALBERT M. HERR, LANCASTER, PA.

ROSES AND CARNATIONS.

The Largest and Finest Stock in the Northwest ever offered at the following prices:

ROSES.—American Beauties, from 2½ inch pots, $7.00 per 100; from 3 inch pots, $9.00, and from 4 inch pots, $12.00 per 100.
Meteor, from 2½ inch pots, $5.00 per 100; from 3 inch pots, $8.00, and from 4 inch pots, $10.00 per 100.
Perles, La France, Mermet, Bride and Niphetos, from 2½ inch pots, $4.00 per 100; from 3 inch pots $6.00, and from 4 inch pots, $9.00 per 100. Per 1,000, send for special quotations.

CARNATIONS.—The leading varieties, from inch pots, $3.00 per 100; per 1,000, from flats, $20.0 .
BEDDING PLANTS.—Large stock in full bloom.
CUT FLOWERS.—At lowest market prices.

Telegraph Orders Promptly Attended To.

CHRIST. HANSEN, Wholesale Florist, St. Paul, Minn.

PANSIES

from flats, showing flower, fine strain, $1.00 per 100; $7.50 per 1000.
Achillea "The Pearl," from flats, $2 00 per 100.
Rooted Cuttings Evergreens and Shrubs, $2 to $4 per 100.

ROGERS NURSERIES, Moorestown, N. J.

VERBENAS.

In Bud and Bloom. Per 100 P. 1000

Mammoth and general collection, choice assortment, all colors, fine bushy plants.....$ 3.00 $25.00

ROSES—Fine healthy stock.

Perles, Mermets, The Bride, Sunset, Papa Gontier, Niphetos, Bon silene, La France, Souv. d'un Ami, Duchess of Albany, Mad. Cusin, Mad. de Watteville 5.00 45.00
Hybrid Perpetual Roses in bud and bloom, from 5 inch pots, strong plants. 25.00
Tea Roses, in bud and bloom, from 4 and 5 inch pots, strong. .... $10.00 and 15.00
Geraniums, double and single, fine assortment of varieties from 2½ inch pots. ... 4.00 35.00
From 3½ inch pots... .... 8.00
Heliotrope, strong bushy plants, 3½ in. pots 6.00
Vinca, variegated, strong, 1 year old, bushy 10.00

Lots of other Fine Stock.

Send for new list.

WOOD BROTHERS,
Fishkill, N. Y.

SWEET POTATO PLANTS.

Jersey Yellow Nansemond Sweet Potato Plants, $1.00 per 1000.

FREEMAN HURFF, Swedesboro, New Jersey.

Association "Flora"

BOSKOOP, HOLLAND.

Now on hand in New York:
CLEMATIS, 3 Years, per 100, $30.00
H. P. ROSES, for forcing, " 9.00
In the best variety, as Alfred Colomb, Anna de Diesbach, B Rothschild, Fisher Holmes, Gen. Jack, La France, Mme. G. Luizet, Mme. Plantier, Magna Charta, Paul Neyron, P. C. de Rohan, Merville de Lyon, Perle des Blanches, Ulrich Brunner and other sorts. Azaleas, Rhododendrons, Spiræas, etc. We also have Palms, Dracænas, Araucarias and Bay Trees at our nurseries in Holland. Catalogue on application.

P. OUWERKERK, 206 Cambridge Ave.,
JERSEY CITY, N. J.

MAGNOLIAS

OBOVATA GRACILIS AND PURPUREA.

Fine, bushy plants, 3 to 8 feet, from $25.00 to $200.00 per 100.

Send for descriptive catalogue and wholesale price list free to all in the trade.

SAMUEL C. MOON,
MORRISVILLE, Bucks Co. PA.
Mention American Florist.

From the Journeyman's Standpoint.

The following letter, recently received, seems worthy of publication, giving, as it does, the views of a member of a class not often heard from in print. In the study of the relations of employer and employed light upon all sides of the problem is desirable:

"ED. AM. FLORIST: Please insert an adv. in your paper for the enclosed $1. There are a good many advertising for men who offer so much a month and board. But these monthly wages are often given in promises to pay next month 'when business will be better.' Sometimes a man doesn't get enough to pay his laundry bill (for washing is not included with board). The board is often poor and the lodging worse—generally a place in the potting shed or a room occupied by six or seven men together. Still they expect a first-class man, sober, industrious, reliable and competent in all branches, nay, even educated. Why will they not pay weekly and let the man board where he pleases? Because such board and lodging as they supply is cheap to furnish and costs but little per month. The almighty dollar is hard to part with except for their own pleasures; then the dollars that really do not belong to them are easily spent. Why not pay the hands first? Probably they think a working hand has no need of enjoyment, the work being sufficient pleasure itself. Some expect their men to work after regular hours, to water the lawn or flower beds, if nothing else, to stay up part of the night watching fires, or perhaps to stay up late for the employer (who sometimes needs a hand or two when his own are helpless). With the AMERICAN FLORIST's kind permission I will write my adv. something like this:

SITUATION WANTED—By a man of 31. Starvation not wanted. There is plenty of room out of doors to sleep in, so no potting shed apartment wanted. Wages to be paid weekly in cash. Willing to do a man's work—not a slave's. For particulars address WORKING HAND, care American Florist.

"Probably I will not obtain a situation from such an advertisement. But never mind. I will try another way of advertising. Something like this:

SITUATION WANTED—By a florist (jack of all trades), sober (when not drunk), industrious (when not asleep), reliable (when you keep your eyes on him), competent (to grow weeds, bugs, etc.) willing to do everything for nothing.

"Perhaps that would please some kind employer wanting a man who will make himself generally useful. There are some florists and amateurs I would like a chance to hit, and to hit hard."

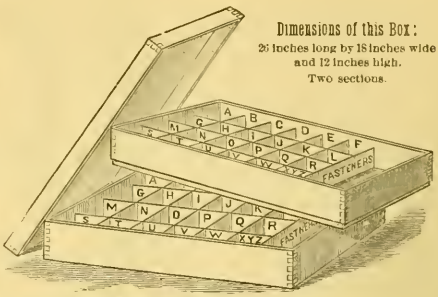
C—— H——

CRESTLINE, O.—Nicholas Amos, manager of the Wannieta Ranch, has completed an additional new greenhouse 30x160.

WILLOUGHBY, O.—H. R. Carlton, formerly of Wickliffe, has located here and is building three houses, of which one is 20x48, one 18x100 and one 11x100. Steam will be used for heating.

MADISON, WIS.—The Board of University Regents has invited an architects' competition for plans for the new horticultural building to be constructed on the university farm at a cost of $18,000, authorized by the legislature at its last session.

D. H. ROBERTS,
159 & 161 South 5th Ave., New York.
NATURAL GAS MADE GLASS
for Rose Houses, Conservatories, etc., etc.
Our glass received the highest award at the Boston Convention of the S. A. F.
Mention American Florist.



With an order for 500 letters, we furnish a box made of wood, nicely stained and varnished, such as is represented in the cut.

BOSTON FLORIST LETTER CO.

Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1½-in. and 2-in. 2.00 per 100. Patent fastener with each letter.

OUR NEW SCRIPT LETTER, $4.00 per 100.

N. F. McCARTHY, Treas. & Mangr. | Address 13 Green St., Boston, Mass.

Address all correspondence to 1 Music Hall Place.

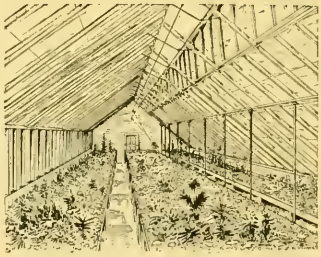
We have a new FASTENER which we consider a decided success. Any customers having old style fasteners which they wish to exchange, can do so without additional cost by writing us.

AGENTS.

Marschuetz & Co., 25 N. 4th St., Phila., Pa.
A. Roiker & Sons, New York.
F. E. McAllister, 22 Dey St., New York.
A. D. Perry & Co., 33 Warren St., Syracuse, New York.
Ernst Kaufmann & Co., 113 N. 4th St., Phila.
H. Bayersdorfer & Co., Philadelphia, Pa.
A. C. Kendal, 115 Ontario St., Cleveland, O.
J. A. Simmers, Toronto, Ont. Agent for Canada.
E. H. Hunt, 79 Lake St., Chicago, Ill.
Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.
H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O.
T. W. Wood & Sons, 6th and Marshall Sts. Richmond, Va.
Jas. Vick's Sons, Rochester, N. Y.
C. A. Kuehn, 112½ Pine St., St. Louis, Mo.
D. B. Long, Buffalo, New York.

These Letters are handled by all the Wholesalers in Boston.

THE CHAMPION



Automatic Ventilator.

The cheapest, easiest to operate, and by far the best machine in the market. Don't buy a Ventilator until you have seen my illustrated descriptive circular, which will be sent you free, giving prices, etc. Also Champion Soil Pulverizer and Sifter.

Address, E. E. WOLF, Box 114. SPRINGFIELD, O.

STANDARD HOSE MENDER.

The only Mender using ordinary galvanized wire No. 14, instead of expensive bands. Any person can handle it with perfect ease. Thousands in use and all testify to its Wonderful Merits.

Sample Box, by Mail, 50 cts.

E. HIPPARD, Youngstown, Ohio.

FLORISTS' HOSE,

Made by E. W. Holt, member of the Society of American Florists.

Goodyear Rubber Store,

2 W. 14TH ST. NEW YORK.

Please mention the AMERICAN FLORIST every time you write to an advertiser.

The FAIRBANKS GALVANIZED STEEL Wind MILLS AND TOWERS

Are WARRANTED to be as well made, of as good material, and to produce more power than any other steel mill made.

THE ECLIPSE WIND MILL

the Original Self-regulating Wood Wheel.

Pumps, Tanks, &c. Send for Catalogue and Prices.

Fairbanks, Morse & Co., Chicago, Ill.

CUTS!

Wood Engraving, Zinc Etching, Half-Tone, Wax Engraving, Photo-Engraving, Designing.

MANZ & CO., ENGRAVERS.
183 Monroe Street, CHICAGO.

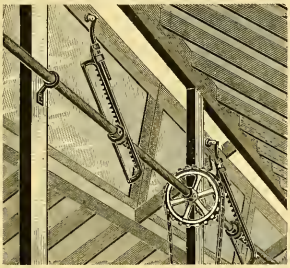
CATALOGUE PRINTING. ELECTROTYPING.

Done with expert ability for Florists Nurserymen, Seedsmen. Write to

J. Horace McFarland Co., HARRISBURG, PA.

SEE HERE BROTHER FLORIST!

Aren't you tired going through your houses two or three times a day year after year and lifting your ventilating sash one at a time and propping them up with sticks or pots, with a chance of having sash blown off and broken glass to pay for? If you are



We have got just the thing you need, the **Newest** and **Best** thing out. "The New Departure" for **about half** the cost of the old style. Send for Descriptive Catalogue to

J. D. CARMODY, Evansville, Ind.

TO TAKE PLACE OF WIND MILLS

HOT AIR PUMPING ENGINES

A Windmill

Is unreliable because it depends upon the element for its power; hydraulic rams also depend upon favorable conditions and waste as much water as they secure. Steam pumps require skill and hand pumps demand labor and time. The

DE LAMATER-RIDER OR DE LAMATER-ERICSSON Hot-Air Pumping Engines

are especially designed for pumping water, and from shallow streams or any kind of well. They are simple, safe and reliable, require no steam and have no valves. They require very little heat to operate them, and can be arranged for any kind of fuel.

Send for illustrated catalogue to

THE DE LAMATER IRON WORKS,
87 South Fifth Av.,
NEW YORK, N. Y.

GET THE STATE STRAIGHT!

Needed by every Florist, Market Gardener, owner of Lawn, owner of Grass Plat and Flower Bed, in fact, by every one who has a faucet and hose. The Union Hose Connection (patent applied for) for applying manure, fungicides and insecticides to plants. Feed your plants, fertilize your lawns by using liquid manure. A durable device, simple, scientific and practical. No bad odor, no ugly appearance, healthy plants, vivid lawns. Sent by mail prepaid for $2.50. Send for circular. Address **Hose Connection Co.**, Kingston, Rhode Island. Only 22 Kingstons in the U. S. **Get the State Straight.**

Mention American Florist.

THE "LOCKLAND" Sash Bars

ARE ALWAYS SATISFACTORY.

This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.

GUTTER MATERIAL, RIDGES, SASH, ETC.

The finest CLEAR CYPRESS used.

Write for circulars and estimates. . . .

LOCKLAND LUMBER CO.
. . . . . **Lockland, O.**

SMITH & WEBSTER,

MAKERS OF

GREENHOUSE PIPE

FOR HOT WATER AND STEAM,

193 Lake Street, CHICAGO, ILL.

FRENCH GLASS For CONSERVATORIES, ROSE HOUSES, Etc. Etc.

VANHORNE, GRIFFEN & CO.,

Importers of PLATE and WINDOW GLASS. Manufacturers of BENT GLASS and FRENCH MIRRORS.

131-133-135-137 FRANKLIN STREET, **NEW YORK.**

Note—Imported Glass is used in the best grade of Greenhouse building.

GOODYEAR RUBBER CO.

ALL KINDS RUBBER GOODS.

We make a **SPECIALTY** in **GARDEN HOSE,** in both **Rubber** and **Cotton.**

A GREAT VARIETY OF HOSE REELS, SPRAY PIPES, SPRINKLERS, ETC.

141 Lake Street, CHICAGO.

STOTT'S SYRINGE.

Read advertisement in next week's issue

THE PERFECT DRAINAGE

BENCH TILE

For circulars, etc., address

W. P. Wight, Upland Green Houses,

Send your business card. MADISON, N. J.

STRING

Your Smilax and other trailing plants with

GREEN SILKALINE.

Same cord can be used with plants when decorating. For samples and prices, address

JOHN C. MEYER & CO.,
289 Devonshire Street, BOSTON, MASS.

EVANS' IMPROVED

CHALLENGE VENTILATING APPARATUS

Write for Illustrated Catalogue.

QUAKER CITY MACHINE WORKS, Richmond, Ind.

IMPROVED GLAZING.

Zinc Joints for putting glass without laps. No leakage. No sliding of glass. Practically air tight. Keeps out cold winds, thereby saving fuel. No laps, saves enough glass to pay for the zincs. No breakage of glass on account of frost or ice. Some of the largest growers in the country are using "Gasser's Patent Zinc Joints" with entire satisfaction. Write for sample and price list.

J. M. GASSER, FLORIST,
101 Euclid Ave., CLEVELAND, O.

OUR

Sash Lifter AND Hinges

will do the work and cost you less than any other. Send your name and address and we will mail you description and price.

BAY STATE HARDWARE CO.
272 Freeport Street, BOSTON, MASS.

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

Always mention the American Florist when writing to advertisers.

Cincinnati.

We regret very much to be called on to announce the death of Mrs. Sarah Critchell, wife of B. P. Critchell, which occurred on the evening of May 23. Mr. Critchell has the sympathy of a host of friends.

Trade has been very good for the time of year and both retail and wholesale florists have no reason for complaint. Otto Walker reports a good business at his new store on Vine street. T. W. Hardesty seems to handle the orchid business of this city in a retail way, and turns out some very handsome bouquets.

Decoration Day orders are coming in very nicely and good promise of a good weeks trade. On June 12 the Order of the Mystic Shrine holds a national meeting here and we hope this will stimulate demand.

Orchids are quite plentiful in this market at present. GILLETT.

MARGUERITE CARNATIONS.—Seedlings were recently received from Robert Linney, Akron, Ohio. The flowers were as large and double as the average blooms from indoor carnations; color a deep pink slightly flaked with magenta. They seemed a fine example of the useful Marguerite strain.

WE request subscribers to make remittance by draft or money order when renewing subscriptions, and to keep a record of the numbers and dates of same. This is to guard against losses in the mails.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

Clear Cypress, from bottom gutter up is my specialty.

Lyman Felheim, ERIE, PA.

J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS •

Greenhouse Material,

LOUISVILLE, KY.

Always mention the American Florist when writing to advertisers.

"Standard" Flower Pots.

As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address

The Whilldin Pottery Company,

BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.

Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.

A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.

We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be heat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.

SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY

Manufacturing the

ELVERSON, SHERWOOD & BARKER

STANDARD FLOWER POTS.

Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bud Pots, etc.

ADDRESS PITTSBURGH CLAY MF'G CO., New Brighton, Pa.

H. M. HOOKER COMPANY,

57 and 59 W. Randolph Street, CHICAGO,

NATURAL GAS MADE GLASS

FOR GREENHOUSES.

Write for latest prices.

ESTABLISHED 1866.

FLORISTS WIRE DESIGNS

MANUFACTURED BY

N. STEFFENS

335 EAST 21ST ST. NEW YORK.

GLASS

which is absolutely perfect for modern greenhouse construction.

ROCK BOTTOM PRICES.

Send for Estimate. Satisfaction Guaranteed

REED GLASS CO.

65 WARREN STREET and 46, 48, & 50 COLLEGE PLACE,

—NEW YORK CITY.—

Lawn Vases.

THE LARGEST IN THE MARKET FOR THE MONEY.

17x20-inch ....price $1.00.
17x34-inch, with base, price $1.75.
20x22 inch. .....price $1.50.
20x22-inch, with base, price $2.25.

Send for our price list of Standard Flower Pots, Plain and Fancy Vases, etc., etc. Terms cash f. o. b.

HILFINGER BROS. POTTERY, Ft. Edward, N. Y.

FLORAL DESIGNS

The Cut Flower Worker's friend. Fine book of 160 pages. Send $3.50 for it, to

J. HORACE McFARLAND, Harrisburg, Pa.

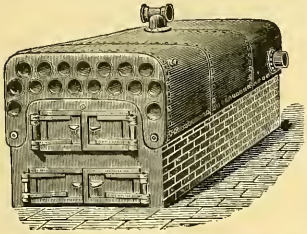
Mention the American Florist when writing to advertisers on this page.

ESTABLISHED 1854.

DEVINE'S BOILER WORKS.

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers

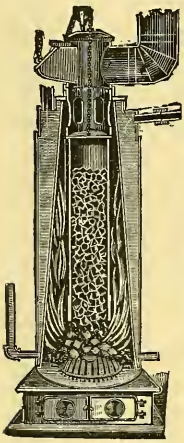


Capacity from 350 to 10,000 feet of four-inch pipe.
SEND FOR NEW LIST.

FRANK DAN BLISH, Att'y,

OFFICE, 189 STATE STREET.
WORKS, 56th & WALLACE STREETS,
CHICAGO.

Mention American Florist.

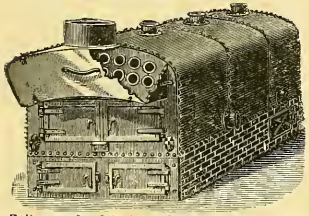


THE WILKS HEATER,
FOR HEATING
GREENHOUSES, STORES, DWELLINGS, ETC.
Manufactured by *THE S. WILKS MF'G CO.* 123 S. Clinton St., CHICAGO, ILL.
SEND FOR CATALOGUE.

KROESCHELL BROS.
IMPROVED

Greenhouse Boiler,

41 to 55 Erie St., CHICAGO.



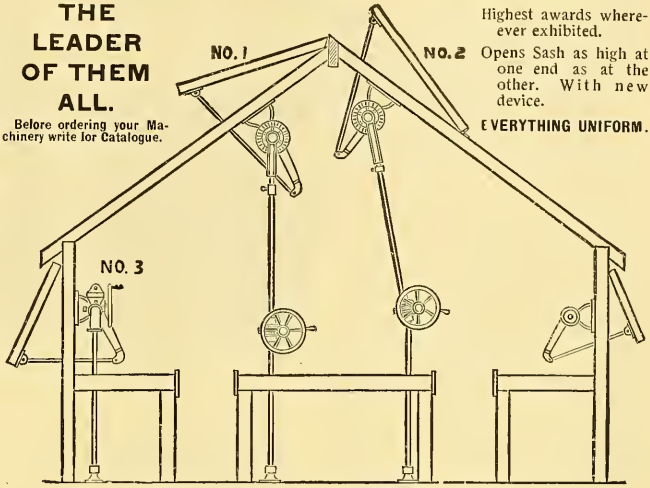
Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around front, sides and back). Write for information.
Mention American Florist.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN.
DO IT NOW.
JOHN G. ESLER, Sec'y F. H. A., Saddle River, N. J.

STANDARD VENTILATING MACHINERY,

THE LEADER OF THEM ALL.

Before ordering your Machinery write for Catalogue.



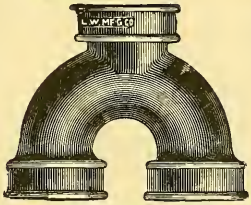
Highest awards wherever exhibited.

Opens Sash as high at one end as at the other. With new device.

EVERYTHING UNIFORM.

E. HIPPARD, YOUNGSTOWN, OHIO.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

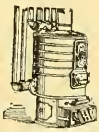
Mention American Florist.

L. WOLFF MFG. CO., 93 to 117 W. Lake Street, CHICAGO.

WRITE FOR ILLUSTRATED CIRCULAR.

Gurney

HOT WATER HEATERS and RADIATORS
FOR HEATING
Dwellings, Public Buildings, Etc.
BY
HOT WATER CIRCULATION



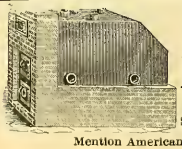
GURNEY.

The apex of success in house heating is reached by the Gurney Heaters. Their excellent work during the past severe winter is but another tribute to their superiority. Our book "*How Best to Heat Our Homes*" sent free to anyone.

Gurney Hot Water Heater Co.
163 Franklin St., Boston, Mass.
59 Wabash Ave., Chicago, Ill.

SELLING AGENCIES:
Johnson & Co., 71 John St., New York.
J. C. F. Trachsel, 246 Arch St. Philadelphia.

DOUBLE CROWN.



GREEN-HOUSE HEATING.
MYERS & CO.
1518 & 1520 S. 9th St., PHILADELPHIA.
Send for catalogue and price list.
Mention American Florist.

GREENHOUSE HEATING
AND VENTILATING.
Superior Hot Water Boilers.
JOHN A. SCOLLAY,
74 & 76 Myrtle Ave., Brooklyn, N.Y.
Send for Catalogue.

Index to Advertisers.

Abel C C & Co....1134 1135
Adv. Rates, etc. 1133
American Boiler Co ..1144
Anchorage Rose Co. ..1131
Baller F A. 1137
Barnard W W & Co....1135
Basset O P.....1140
Bay State Hdw Co....1141
Bayersdorfer H & Co ..1138
Boehmer L & Co 1134
Bonsall Jos E & Son ..1130
Boston Letter Co 1140
Brackenridge & Co....1137
Brauer & Hichter....1138
Brown R S & Son 1137
Burns & Rayner.....1133
Burrow J G..... 1132 1137
Burton John.....1131
Carman R W.....1134
Carmody J D.....1141
Chandlee Geo F 1138
Chicago Cut Flower Ex1137
Cook John.....1131
Corbrey T J ...1132 1133
Currey G W & Co 1135
De Lamater Iron Wks1141
Devine's Boiler Wks..1043
Dreer H A.....1137
Elliott W H.....1132
Ellison Wm.....1133
Fairbanks Morse & Co1140
Fairfield C F.....1136
Faust H G & Co 1135
Felheim Lymnn 1142
Field S B.....1139
Forstermann F. 1137
Frost James 1130
Gasser J M 1141
Gonzalez & Co.....1137
Goodyear Rubber Co..1141
Goodyear Rubber Store 1140
Gurney Heater Co ..1143
Hall Ass'n.....1143
Hammond Benj.....1138
Hancock Geo 1136
Hansen Christ 1139
Hart James.....1135
Hart Michael A 1133
Hart & Crouse.....1144
Hartford H E.....1132
Henshaw Samuel.....1137
Herendeen Mfg Co....1144
Herr Albert M.....1139
Hews A H & Co 1142
Hilfinger Bros.....1142
Hill E G & Co.....1131
Hippard E 1140 1143
Hitchings & Co.....1144
Holmedale Green-houses 1131
Hooker H M Co. 1142
Horan Edw C.....1135
Hose Connection Co 1141
Hucklins E 1139
Huisebosch Bros 1135
Hunt E H.....1132
Hunt M A..... 1131 1137
Hunter & Purdy 1133
Hurff Freeman.....1139
Kaufmann Ernst & Co1138
Kemble Florist Co . .1137
Kennicott Bros.... . 1133
Koffman E 1138
Kroeschell Bros .1143
Kuehn C A.....1133
Langan Bros.....1139
La Roche & Stahl 1132
Lockland Lumber Co..1141
Lombard R T 1136
Long Dan'l B.....1133
Lonsdale Edwin.....1136
McCarthy N F & Co.....1130 1133
McFarland J H.....1142
McFarland J H Co....1140
Midland John.....1137
Manz J & Co.....1140
Marschuetz & Co.....1138
May John N.....1137
May L L & Co 1139
Meyer John C & Co. .1141
Michel Plant & Bulb Co 1137
Millang Bros.....1133
Moffatt G J.....1135
Moninger Jno C .. .1144
Moon Samuel C.....1139
Moore Frank L.....1139
Myers & Co 1143
Nanz & Neuner.. ... 1131
Nielson Hans 1139
Niles Centre Floral Co1133
Olsen M 1133
Ouwerkerk P.....1139
Peck & Sutherland....1133
Pennock C J.....1136
Pennock Sam'l S ... 1132
Pierson F R Co.....1131
Pittsburg Clay Mfg Co1142
Prince A G & Co 1133
Quaker City Mach Co.1141
Randall A L. 1133
Reck John 1138
Reed Glass Co 1142
Reimschneider Ernst.1134
Reiss & Brady.....1135
Renard Joseph.....1139
Reuter S J.....1136
Rimbaud Benj..... .. 1135
Roberts D H.....1140
Roehrs Theo.....1133
Rogers Nurseries.....1139
Rolker A & Sons 1138
Russell S J.....1138
Sander & Co.....1137
Schneider Fred. 1139
Schulz Jacob.....1139
Scollay John A 1143
Scott Robert & Son...1139
Segers Bros.. 1135
Segers & Co 1134
Shelmire W K.....1136
Shepherd Mrs T B ..1138
Sheridan W F.....1133
Siebrecht & Wadley...1137
Simons E E.....1139
Siptle, Doptfel & Co...1142
Situations, wants. ...1129
Smith C A Floral Co..1139
Smith Nathan & Son..1139
Smith & Webster.....1141
Steffens N.....1142
Stott Garden Imp Co..1141
Struck J N & Bro.....1142
Styer J J 1136
Sunderbruch H L.....1133
Taylor John H.....1131
Tesmer Julius & Co...1136
Tricker Wm.....1139
Tritschler M ... .1137
Vander Schoot R & Son. 1135
Van Horne Griffen & Co 1141
Van Tubergen C G Jr.1135
Van Waveren & Kruyff.. 1135
Vaughan J C.....1137
Weeber & Don.....1135
Welch Bros.....1133
Wulldin Pot Co 1142
Wight W P.....1141
Wilks S Mfg Co.... ..1143
Williams H W & Son..1139
Winter N D 1139
Wisconsin Flower Ex.1136
Wolf E E 1140
Wolff L Mfg Co.....1143
Wood Bros.....1139

NASHVILLE, TENN.—W. C. Machamer, formerly of Sabetha, Kans., will soon build a range of houses at Shwab, near this city.

CYPRESS GREEN HOUSE MATERIAL

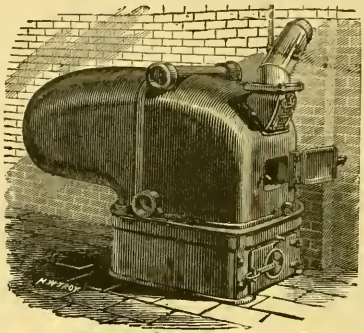
CLEAR CYPRESS SASH BARS

HOT BED AND VENTILATING SASH

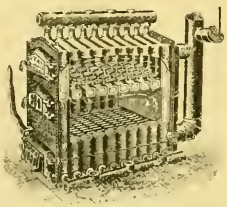
JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

Mention American Florist.

GreenHouse Heating and Ventilating
Horticultural Architecture and Building.



HITCHINGS & CO.
Established 1844.
233 Mercer St., New York.
FIVE PATTERNS OF BOILERS.
NINTEEN SIZES.
Perfect Sash Raising Apparatus.
Rosehouses, Greenhouses, Etc, of Iron Frame Construction, Erected complete, or the Structural Iron Work shipped ready for erection.
Iron Frame Benches with the "Perfect Drainage Bench Tile" or Slate Top.
SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUE.



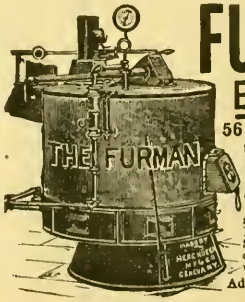
The Most Perfect Heaters yet designed FOR GREENHOUSES.

Royal Heaters.
—:o:—
HOT-WATER, STEAM.

Circulation all Vertical.
No Drop Tubes.
All Cast Iron.

HART & CROUSE,
UTICA, N. Y.

STEAM · AND · HOT · WATER · HEATERS
FOR
GREENHOUSE HEATING.
156
DIFFERENT SIZES.
American Boiler Company.
BOSTON, 195 Ft. Hill Square. NEW YORK, 94 Center St. CHICAGO, 34-36 Dearborn St. DENVER, Mining Exchange Bldg. SAN FRANCISCO, 80 Crocker Bldg.



FURMAN BOILERS
Economical — Substantial — Safe.
56 STYLES AND SIZES—BURNS HARD OR SOFT COAL.
Modern Hot-Water Heating

These Boilers have a high reputation for Staunchness, Durability and Safety, and are GREAT COAL SAVERS. Minimum Friction and Maximum Velocity only obtained by VERTICAL WATER CIRCULATION. Send for new 150-page book giving full particulars and a great deal of valuable information on modern Heating and Ventilation, with plans and tables for correct hot-water work. Mailed free.
Address HERENDEEN MFG. CO., 26 Vine Street, GENEVA, N. Y.

THE AMERICAN FLORIST.

A WEEKLY JOURNAL FOR THE TRADE

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, JUNE 8, 1893.** **No. 262**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company. Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY,
322 Dearborn Street, Chicago.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,
P. O. Drawer 164, CHICAGO.

Eastern Office: 67 Bromfield St., Boston.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis, Mo., August 9 to 12, 1893.

CONTENTS.

Some flower show statistics 1145
The World's Fair 1146
Fountain at the World's Fair (illus) 1146
Graftiug, II 1147
Roses—Hybrid teas for bedding 1148
—Our telephone 1148
After the hail storm (with illus) 1149
Carnations—Seasonable hints 1149
—Chester County Carnation Society 1149
Allamandas 1149
As it appears through four eyes 1150
South American ox cart (illus) 1150
Greenhouse walls and benches (illus) 1151
Washington 1151
New York 1151
Golden gate of Transportation Building (illus) . 1152
Boston 1152
Philadelphia 1152
Clematis paniculata (illus) 1153
St. Louis 1154
Patents recently granted 1154
Our annual convention number 1156
The seed trade 1158
Chicago 1160
Recent legal decisions 1162
San Francisco 1164
Foreign notes 1164
Decisions regarding duty on plants 1166

THE annual convention of the American Association of Nurserymen is now in annual session in Assembly Hall in the grounds of the World's Columbian Exposition at Chicago. A report of the proceedings will appear in our next issue.

WE request subscribers to make remittance by draft or money order when renewing subscriptions, and to keep a record of the numbers and dates of same. This is to guard against losses in the mails.

BOSTON.—Owing to the lateness of the season the rhododendron show of the Mass. Hort. Society will be held June 13 and 14—one week later than the dates previously announced.

PLEASE WRITE on your printed letter head when addressing our advertisers. If you have no printed letter head, then enclose your business card or bill head.

Some Flower Show Statistics.

RECEIPTS AND ADVERTISING.

In the fall of 1891 I was warmly interested in hunting for new wrinkles in flower show "booming." I had been helping the publication committee of the Philadelphia show to secure the necessary publicity, and as we were all amateurs in the business we went at things rather haphazard.

After that show was over I placed myself in correspondence with those in charge of such matters in other cities, with the idea that my own theory of the right way to do the advertising might be confirmed or condemned, or that I might find some new and interesting methods. The result of this correspondence in brief is presented in the following table:

CHRYSANTHEMUM SHOWS 1891.

	Open	Total Receipts.	Cost Adv.	
Washington, D. C.	5 days	$ 683.75	$ 78.00	(All in newspapers.)
Buffalo, N. Y.	4 "	859.40	160.00	($65 in newspapers; $71 in posters, signs and cards $25.
Boston, Mass.	4 "	1677.75	156.50	(All in newspapers.)
Providence, R. I.	3 "	559.00	189.72	($167.44 in newspapers; $22.28 in chromos.)
Louisville, Ky.	7 "		190.00	($180 in newspapers; $10 in chromos.)
St. Louis, Mo.	3 "	1317.30	70.00	(Window cards and chromos $20; balance in street cars.)
New Bedford, Mass	3 "	217.69	23.83	($13.83 in newspapers; $10 in chromos.)
Toronto, Ont.	4 "	850.00	135.50	($67.50 in newspapers; $30 in posters; $7 in window cards; $31 in chromos.)
Baltimore, Md.	4 "		312.00	($131 in newspapers; $25 in posters; $25 in chromo, Souvenir $131.)
Minneapolis, Minn.	5 "	854.95	300.00	(Of this sum $80 in newspapers $23.75 in chromos; balance in carrying illuminated signs evenings.)
Philadelphia, Pa.	5 "	3066.25	386.57	($276.74 in newspapers; engraving comp. and electro $1608, lithos. and window cards $34.48; American Florist $42; typewriter, messenger and stamps $7.20; soliciting $10.07.)

NOTE:—Although Philadelphia is first for total receipts in above table St. Louis would take first for attendance—the St. Louis show lasting 3 days and the admission fee being twenty-five cents against Philadelphia 5 days and fifty cents admission. If St. Louis can get as many at fifty cents as at twenty-five cents and keep open 2 days more she can take the pennant from Philadelphia. Twenty-five cents was tried in Philadelphia, attendance at fifty cents just as good. If Boston could do as well at fifty as twenty-five she would put Philadelphia in third place.

The first city on the list, Washington, shows an average income per day of $136.75 and advertising expenses per day of $15.60, all in the newspapers. If this expenditure had been doubled would the attendance have been double also? Suppose that it had only brought one hundred more people to the show wouldn't it have been a paying investment in printers' ink?

Buffalo had an average income per day of $214.85 and daily advertising expenses of $40.25, but of the latter sum only $16.25 went to the newspapers. One can't expect to buy much newspaper space for $16.25 if the newspaper amounts to anything in circulation or character. The deduction is almost irresistable that a city with a population like Buffalo ought to have spent more money on the newspapers.

Boston, to which horticulturally we all take off our hats, makes a good showing with $419.44 income per day and $39.13 daily advertising expenses—all in the newspapers. That particular show was claimed by the Bostonians to have been one of the most successful ever held, and yet in a city with close on 500,000 inhabitants there ought to have been more than 1600 people to visit that show daily and pay their admission fees. What would the late lamented Barnum have thought of spending $39 per day advertising a show that cost any way from 3 to 5 thousand dollars getting it up, and not counting the value of the exhibits at all!

The inference in the matter of these three cities: Washington, Buffalo and Boston, is that they might have dipped a little deeper into printers ink without much fear of disastrous results, but on the contrary a strong probability of good returns.

But this beautiful theory gets a black eye the next minute when we look at the result in Providence $186.33 daily income; $63.26 daily advertising, and nearly all in the newspapers. Of course there is to be taken into consideration that Providence does not have the population of Buffalo, also that the show lasted only three days instead of four or five in the cases of the other places cited. The advertising may have only been just beginning to tell when the show was closed. If it had been kept open two days longer after being so well advertised the result might have been entirely different. This shows how difficult it is to lay down any hard or fast rule in regard to how much of an appropriation an advertising committee ought to have. The size of the city, the cost of the show, the number of days open, all have to be taken into consideration. Perhaps our Providence brethren had bad weather, perhaps the show was poor, perhaps the newspaper people charged them too much (such a thing has been heard of) perhaps there was some big counter-attraction running.

However, next comes St. Louis with a three days show and a daily income of $439.10, and advertising per day only $23.33, and not a cent in the newspapers! That knocks even Boston, and window cards, chromos and street cars take a step to the front. And yet it seems almost incredible such a successful attendance could have resulted from such a meagre

pendit: [illegible] mediums of street cars, chromos and window cards. There is a "wrinkle" here somewhere and perhaps St. Louis will come forward and tell us how to apply it. Did she do as well in 1892 with the same methods?

New Bedford had a three days show with daily receipts $72.56 and advertising $7.94, partly in newspapers, partly in chromos, certainly a very modest advertising bill.

Toronto does not differ a great deal from Buffalo, the daily receipts being $212.50, with advertising of $33.88 per day, $16.88 of same being in the newspapers, and Toronto may also be put down as capable of standing a little more printer's ink with safety.

Minneapolis had a five days show, and receipts were $170.99 daily and expenses for advertising $60.00 per day, but only $16.00 of this was in the newspapers, the balance being mostly spent for carrying illuminated street signs. This is the only instance in our list of the illuminated street sign having been tried.

It was a costly experiment and does not seem to have been very effective.

Philadelphia is the last on the list, but has the largest daily receipts of any namely, $613.25 per day, advertising $77.25 per day. Of this latter sum $55.35 was in the newspapers. It is proper to state that of the total newspaper expenditure of Philadelphia, $42 went to the AMERICAN FLORIST in *advertising for exhibits*. Now there is a difference between advertising for exhibits and advertising for attendance. The cost of the former belongs more properly to the same category as the prize list, and other expenses of getting up the show, rather than to advertising proper.

The receipts of Louisville and Baltimore were not furnished and no comparisons can be made. The item of $131 for souvenir mentioned in the Baltimore statement may need explanation. A souvenir is part of the attractions of the show the same as the flowers or the music or any other novelty. It would therefore come more consistently as an item of cost of the show rather than advertising, and, furthermore, wasn't the souvenir almost a self-paying production. From looking a copy over casually one would almost be led to think there was advertising enough in its pages to *more* than pay its cost.

From the foregoing it will be seen that the facts brought to light are somewhat contradictory but I confess to rising from the study of them with my belief in the newspaper as the mainstay for effective advertising still strong. Washington, Buffalo, Boston, Toronto, Minneapolis, and Philadelphia, bear this out, leaving Providence and St. Louis to contradict it and Baltimore and Louisville unheard from.

If any lesson is to be learned from this table of facts, it seems to be:—more generous appropriations for advertising, and giving a larger share of these to the newspapers. The time for the committees having the matter in charge to move, is when the various appropriations for the year are being made. Let them stand up for a good deal more than heretofore, let them use it intelligently and the results (everything else being in good shape) cannot fail to be entirely satisfactory.

G. C. WATSON.

Philadelphia, May 25, 1893.

[We are very glad to be able to present to our readers the above very interesting article by Mr. Watson, giving, as it does, actual figures of receipts from attendance and disbursements for advertising. We consider his deductions correct so far as they go, but we do not believe that they go quite deep enough. In comparing the value of newspaper advertising of an exhibition with that which is done through the medium of posters, street car cards or other similar means, it must not be overlooked that it is in the power of the newspapers to contribute free without any additional cost to the advertisers publicity whose value can hardly be estimated by any established rule. And while we feel certain that the news reports of the exhibitions may not be affected directly by the amount of advertising placed with that particular paper, still there unquestionably is an effect in establishing what might be termed friendly relations by this means. Further, the value of full and glowing reports of the exhibition cannot be measured entirely by the attendance at the exhibition then open, for it must not be forgotten that an effect has been made upon the large number of people who may not be able to attend this year, but who will have been partially influenced toward attending future exhibitions of the kind. All advertising experts now admit that advertising values are largely cumulative. Therefore, while advertising done this year should bring appreciable results, a considerable portion of the expenditure may be considered as an investment, which may not bring any marked returns until another show shall be given. Considering this view of the matter, an exact comparison of proportions between the various cities is not exactly fair. For instance, in cities such as Boston and Philadelphia, where first-class exhibitions have been continuously held for years, and the same have not only been advertised by expenditure on the part of the exhibition managers, but by very full and complete reports of the exhibitions as they occur, it should require the expenditure of a much less proportion of the receipts in advertising in order to secure an adequate attendance. Or, putting it the other way, the expenditure of a considerable sum should bring about much better results than in other cities where exhibitions are comparatively new to the people. This fact has been well demonstrated in Chicago. For the last three exhibitions the same sum ($500) has been annually expended in advertising, with a continual increase in the receipts. At the last exhibition, while the receipts showed an increase over all previous years, the attendance was not quite up to that of the year before, for the simple reason that the admission fee had been doubled. It is the belief of the party who has managed the advertising of the Chicago exhibitions since their inception that the exhibition is still receiving benefit from advertising done years before. Through a careful study of the matter, we would suggest as a basis for the various advertising managers to work from in estimating the amount necessary to advertise the coming shows, that this amount be such as not to exceed 20 per cent of the total receipts from the exhibition of last year, and that it be certainly not less than 10 per cent of same, and probably 15 per cent would be about right in the majority of cases. While more may be expended to advantage if the matter was placed in the hands of some one thoroughly familiar with the placing of advertising to the very best effect, it is probable that more could not be placed to advantage by those who will naturally be called upon to attend to the work for the various exhibitions.—ED.]

The World's Fair.

The most notable horticultural arrivals this week were three novelties exhibited by F. Sander & Co., of St. Albans, England. These plants were Alocasia Watsoni, Dracæna Sanderiana and Oreopanax Sanderiana. The alocasia is a handsome specimen having shining deep green leaves with silver ribs, the reverse of the leaf being deep purplish crimson. It has a very strong habit, though some of its leaves suffered a little during its close confinement of twelve days.

The dracæna is indeed a beauty. It makes a clump of stems clothed with beautiful variegated leaves, silvery green, with a deep border of ivory white on either side. The coloring is exquisite, and it is shown to the greatest advantage on the green mound at the foot of one of the New South Wales tree ferns. This dracæna travelled in perfect condition.

The last plant of the trio is Oreopanax Sanderiana, a very remarkable foliage plant. The leaves are bright green and of a singular shape, suggestive of big poinsettia leaves widened at either side by the addition of a big triangle. The leaves are borne on long petioles, extending from the central stem in a very graceful manner. These three plants received gold medals at the Ghent Quinquennial, and are without question the most remarkable plants now at the Fair, this being their first exhibition in America. They will only be on view for a short time.

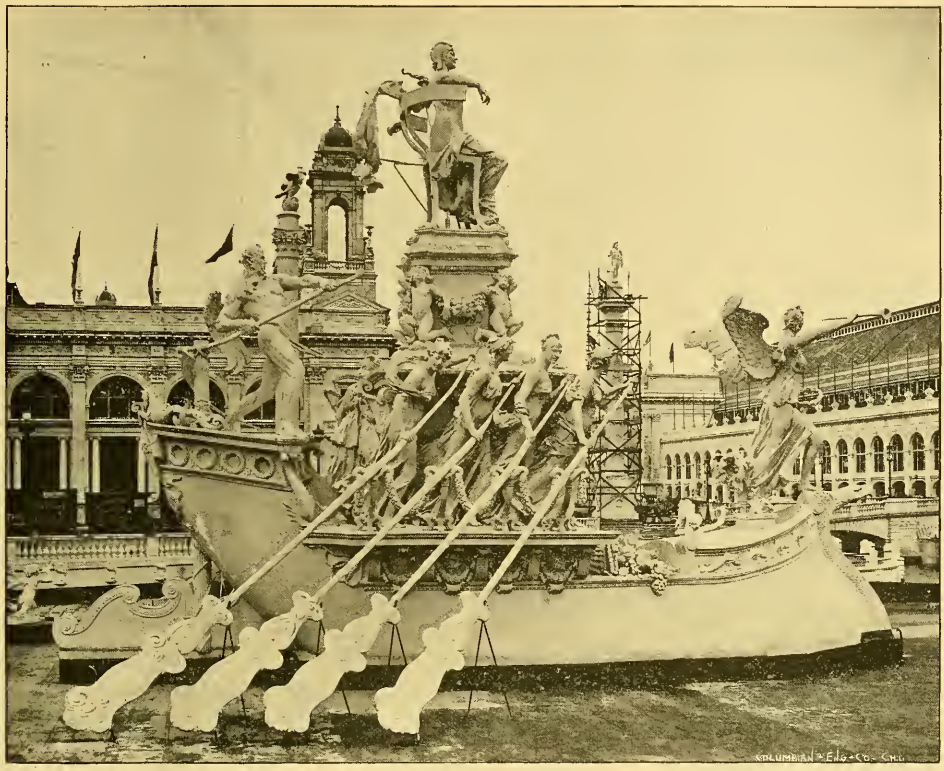
Among the tulips now in bloom Polman-Mooy and Krelage, of Haarlem, Holland, both make a good effect; Krelage has some most attractive hybrids between Gesneriana and purpurea. The tulip display, generally speaking, is not very large. The pansies are now at their best and attract a great deal of notice. They were to be passed upon and judged this week by Robert Craig, of Philadelphia. The pansies will be succeeded by sub-tropical bedding.

The island is still very attractive in its spring dress, and the rhododendrons and azaleas continue to make a fine display. Among the herbaceous plants the columbines make a fine show in clumps among the shrubbery skirting the island. Our native sort, Aquilegia canadensis, makes a very fine display. Another showy hardy plant is Achillea tomentosa, which makes a blaze of yellow here and there.

In the south curtain of the Horticultural Building work is still going on in arranging exhibits. The Missouri plants are now placed to great advantage, having around the center-piece an irregular basin, fed by fountains, which is bordered by the other plants. Several good cactus exhibits are in place, the latest arranged by Mrs. A. B. Nickels, of Laredo, Tex.

Fountain at the World's Fair.

The accompanying illustration shows the central figure in the fountain in front of the Administration building at the World's Fair. It represents the Republic propelled by the arts, with Fame at the prow and Time at the helm. It is a beautiful conception and most artistically wrought. In the back ground is seen one of the columns surmounted by figures of Neptune, of which there are several around the south basin. The photograph was taken a month ago and the scaffolding seen in the picture has since been removed. At the left is seen a corner of the Electricity Building and at the right a small section of the Building devoted to Manufactures and Liberal Arts. At the other



FOUNTAIN AT THE WORLD'S FAIR.

end of the basin, facing the fountain, is the huge gilded statue of Liberty.

Grafting.

II.

BY JACKSON DAWSON.

It should be borne in mind that grafting is only resorted to to perpetuate varieties that do not come true from seed or to facilitate propagation with such as are difficult to propagate in any other way, and that as a general rule own root plants are better every way than grafted plants when they can be procured.

There are occasional exceptions to this rule, however, and in some cases grafting is really a benefit. For instance, I have seen Larix occidentalis seedlings from Oregon which when four or five years old were only a few inches high. Grafts from these seedlings, however, on Larix leptolipis standing side by side with the seedlings were already three times the size and much more beautiful.

In rhododendrons the general stock used is R. ponticum, but if R. maximum could be used instead it would make a much hardier stock, especially for this climate. While ponticum makes a first rate stock below ground, it is no good above ground, and notwithstanding what others may say, I firmly believe that a perfectly hardy stock is best for us to use always. The only trouble has been that while R. ponticum is grown by the hundreds of thousands abroad, maximum is very scarce there.

All the deciduous rhododendrons (azalea), such as sinense, etc., succeed best on Rhododendron (azalea) viscosa or nudiflora, but I like viscosa best. Nudiflora grows naturally on dry woody hills and has not the vigorous growth which viscosa has. Viscosa makes a beautiful stem for standards. All the types of Kalmia latifolia (laurel) can be grafted on the species.

While cratægus can be made a stock for almost every genus of Rosaceæ, such as pyrus, all varieties, amelanchier, quince, mespilus, pear, etc., still it is best to keep as near to the genus as possible in all cases. All apples will do well on P. Malus, excepting that all the varieties of P. baccata and spectabile do best on baccata. A few years ago this stock was hard to get, but it is now plenty and all the Chinese varieties do best on it. The grafts unite better and you get more uniform sized plants.

All the amelanchiers do best on cratægus. It also makes the longest lived stock for mespilus and Pyrus Aria græca, which succeed even better on this stock than on their own roots. Amelanchiers themselves are too apt to sucker, and the mountain ash, which is otherwise good, is too much subject to borers. All the cotoneasters are also good on cratægus.

Prunus Myrobaliana makes a good stock for all the prunuses of the plum type, such as triloba, tomentosa, domestica, etc., while the peaches and all varieties of almond do well on the peach; I think they are all longer lived on Myrobaliana. If this cannot be procured, Prunus domestica will do. In the cherry section the English Mazzard is as good a stock as can be used, except for dwarfs, when Mahaleb makes the best stock. The common pear, Pyrus communis, is good for all species and varieties of the pear unless dwarfs are wanted, in which case the common Angiers quince makes the best stock. Although rather short lived, it comes into fruit more quickly.

The grafting of roses is practiced but little, but it is as easily done as budding, except that budding is done out of doors and grafting under glass mostly. While most growers abroad use Mannetti or Dog Briar, I think we have within our reach a stock which is greatly superior. I refer to Rosa multiflora Japonica. If cuttings of this were made from 3 to 5 inches long and disbudded close to the ground as is done with Manetti abroad, there would be almost no suckering. Rosa multiflora is a quick rooting stock. The roots go actively to work at once. For this reason it is especially useful for forcing, as the pots fill with roots in an incredibly short space of time.

All the lilacs do well on the common lilac or on ligustrum. While it has been the custom to graft on Ligustrum vulgaris, I think now that we have the vig-

orous Chinese species, L. Ibota, it would be well for all our growers who wish to graft lilacs to keep a stock of this. But I am not in favor of grafting lilacs. They ought to be grown from green wood cuttings in June. While it is true that they are slow to root and slow to make plants, I think that the general public will appreciate the value of having plants which remain true, for with the inexperienced cultivator the grafted variety is almost sure to get lost.

All the tecomas (bignonia) graft easily on T. radicans, and they are generally so treated. But I see no necessity of grafting such stock. Cuttings taken off in June and rooted under glass will make strong healthy plants in a few weeks. They all root readily.

All the clematises are easily grafted on the roots of C. flamula or other thick rooted species. Either green or dry wood can be used. If dormant wood, it can be side grafted and tied. There is no necessity to wax them.

Cornus florida and its varieties are grafted on the type. The same is true of C. mascula. In fact all cornuses should go on their own species. When it is possible it is best to grow them from cuttings, but with new varieties this is of course impracticable.

In Hamamelideæ all the corylopsis do well on the witch hazel (Hamamelis virginica). H. arborea, Japonica and others, also Parrotia persica, all succeed well on the same stock.

[TO BE CONTINUED.]

Hybrid Tea Roses for Bedding.

The following list comprises those varieties of H. T. roses which succeed best as out door bedders in this section. Some good varieties are omitted from this list because, although beautiful as forcing roses, they are almost worthless as bedders for outside culture and a few of the varieties partake so much of the habit of the H. P. that they seem out of their appropriate place with the H. Teas:

Antoine Mermet. Clear red; a good bedder in favorable localities.

Antoine Verdier. Rosy lilac, color not clear, not fragrant but one of the best bedders of its class; a constant bloomer.

Attraction. Clear carmine, yellow base, poor grower.

Augustine Guinoiseau (white La-France). Blush, sometimes white, very fragrant, good in favored sections.

Beauty of Stapleford. Red tinged violet, not fragrant, uncertain.

Bona Weillschott. Color fine vermillion and orange centre; a poor grower in this section, but sweet and a good rose where climate favors it.

Camoens. Pale rose, base of petals yellow, fine long buds; a fine bedder with a little extra cultivation.

Captain Christy. Rosy flesh, large and full, erect grower, flowers not fragrant; it should be bedded with H. P.

Cheshunt Hybrid. Red shaded violet, a fine rose but a shy bloomer in this section; it should not be bedded with H. Teas, and will do best planted by a building or fence and canes laid down and covered with soil in winter. This variety requires age to bloom freely, and light pruning.

Comte Henri Rignon. Rosy flesh, very large and double; a poor grower, and requires extra culture.

Countess of Pembroke. Satiny rose, large and full, very fragrant; one of the best of its class with good culture.

Dr. Pasteur. Deep pink, large and double; a straggling grower, tender foliage, uncertain.

Duchess of Albany. A deep La France; a fine bedder with good culture.

Esmeralda. Bright pink, large petals, not very double; good with extra care.

Kaiserin Augusta Victoria. Pure white shaded yellow; one of the finest of its class and will probably prove a good bedder with careful culture.

La France. Silver rose, sometimes pink, very large, double and fragrant; a general favorite.

La France of '89. Large fine red; it should be bedded with H. P. as it is a shy bloomer.

Lady Mary Fitzwilliam. Delicate flesh pink, very large; a poor grower, and worthless for bedding in this section.

Mme. Schwaller. Light pink, large and double; one of the best of its class for bedding.

Mme. Caroline Testout. Clear pink sometimes light rose, large and double; one of the best and most promising of its class, but have not yet tested it for outside bedding.

Mme. Julie Weidman. Salmon pink, large and double; good with careful culture.

Michael Saunders. Clear red, base of petals shaded yellow, large and double; this is one of the finest of its class, but it requires good culture.

Pierre Guillot. Deep red, large, double and very fragrant, petals beautifully imbricated; the finest H. Tea of its color for bedding.

Princess Imperiale du Bresil. Fine pink and carmine, large and double; fine with extra culture.

Souv. de Wootton. Red, large, double and sweet; a fine bedder.

The Meteor. Velvety crimson; one of the finest H. P. Teas, a fine bedder with good care.

Triomphe de Pernet Pere. Deep purplish red; a good bedder.

Viscountess Folkestone. A beautiful satiny pink; uncertain in this section.

W. F. Bennett. Beautiful crimson bud; worthless for bedding. A. WINTZER.

West Grove, Pa.

Our Telephone.

"Hello, central, connect us with Robt. Scott & Sons of Philadelphia. Is that Mr. Robert Scott?"

"No, this is Alex Scott. The old gent doesn't come over here very much lately. What can I do for you?"

"We thought you might be able to give us a few points on roses, new varieties especially. How are they turning out?"

"Wait till next September, I can give you something interesting on the results of the French novelties then. I have got them all."

"All right, we will remember that, but let us have a little now. What is the greatest success of the recent introductions?"

"Oh, Augusta Victoria, by all odds. There is something thoroughbred about the Victoria, you know. It is very healthy and always sends up a good stem from the bottom and never goes blind as Bride is often inclined to. It always comes with a long stem and never clusters,"

"How do you find Testout?"

"Its weak point with us is that it throws a certain percentage of weak stems. But some people prefer this and say it is much more beautiful with a stem which permits of its bending gracefully. From Christmas on it is a good thing. It does splendidly in late winter and spring. It grows finely with us.

"Christine de Noue is a good rose. I think it is an infinitely better flower than Gontier. It is a better and more even crimson color and the petals are much thicker, but it is not as prolific as Gontier.

"Souvenir de Mme. Antoine Levet is a beautiful color, the brightest orange I have ever seen in my life. Wm. A. Richardson is not in it with this one. It is very free, flowering from every shoot.

"For summer cutting the best white rose is the Queen. It is a white sport from Souvenir d'un Ami. It is literally crowded with flowers all summer. It is good when roses of a better shape are scarce around here. The hot, dry weather makes roses pretty scarce in Philadelphia. I consider the Queen and Marie Guillot the best two roses for bench culture in summer, but the Queen will throw three flowers to one of the Guillot."

"You make a specialty of bedding roses, do you not?"

"Yes, and the demand is growing rapidly since the introduction of such useful bedders as Clothilde Soupert and others. Many roses that have been discarded as useless because they failed as indoor growers are grand bedders. Now Wootton was generally condemned when first introduced, and although it is now more in favor as a forcer yet its proper place is as a bedding rose out of doors. We have testimonials without number, this spring, as to its success out of doors."

"Do you claim that it is hardy?"

"No, I cannot say as to that. The only positively hardy bedders are Hermosa and Soupert. There are others which are possibly reliable but I prefer to be strongly conservative than otherwise on that question. Mme. Elie Lambert lived outside with us the past winter in a pot, while hybrids and other things were dying all around it. I will test it further. It is one of the recent introductions in bedding roses, color pale flesh with pink center and a more highly finished flower than Testout.

"Mme. Pernet Ducher is a new hybrid tea of last year's introduction which I find is very fine for bedding. It has buds of pale yellow which in the open flower turn to pure white. It is a very free bloomer, but is no good for forcing. Another hybrid tea of last year's lot that is very fine for out door blooming is Triomphe de Pernet. It does not cluster and the individual flowers are fine. I would put it in the best twenty-four teas for florists' use. Marion Dingee is the best crimson bedder we have. Mary Washington is a mighty poor rose but it sells. Did it ever occur to you that a thing can be a humbug without being a fraud? White La France is having a big sale this year for summer flowering."

"Have you noted anything striking in new hybrid remontants?"

"Oh, Rodocanachi is the very best hybrid for florists' forcing. It is a shade lighter than Brunner, same size and thicker petals. It sold for 35 cents last winter when Brunner brought 25. It lights up fine at night.

AFTER THE HAIL STORM.

"Prince Arthur is a comparatively new rose with us which is recommended by some as a forcer. It is a splendid out door rose but the flowers have neither substance enough nor size to make it profitable for forcing. Roseiriste Jacobs is much better for this purpose. It is almost as dark in color as Bonstettin. Margaret Dickson, while one of the best for out-door culture, is not worth anything for greenhouse culture. It is apt to come blind."

"Can you tell us something about your methods of propagating?"

"Robert Scott was the pioneer in the hard wooded cutting method here. His original plan was to construct a brick bed three feet deep and fill in with tan and two inches of sand. Cuttings were taken from outside wood first week in November, and kept at a temperature of 40° to 45°, and potted up in beginning of March. We have discarded the tan bark method and find that they root very well in a cold house with three inches of rotten rock or coarse sand.

"We take the prunings of dormant stock in the fields, also from plants that had been forced the previous winter. We prune in October. For hybrids for planting out I prefer this hard wooded cutting system. It gives the best plants, but it is very uncertain however, and I think it is wise to prepare for both hard and soft wooded cuttings. Many fail with dormant wood cuttings, and there are some varieties which cannot be rooted this way, and the success varies from one year to another.

"Our system of growing roses for mailing is to grow them in summer and ship semi-dormant, as the plant must be hardened well in order to stand the strain of the mail. But for florist trade they need to be in good growing condition with fresh healthy roots.

"I might add, with regard to cuttings from dormant wood that a great cause of failure lies in the potting. The roots are very brittle and the soil has to be packed very firmly to insure success. A man can pot four to five thousand soft wood cuttings to one thousand of these.

"Happy to tell you that our last advertisement in the American Florist sold sixteen thousand McGowans for us right away."

After the Hail Storm.

The accompanying engraving shows a few of the greenhouses of Mr. G. M. Kellogg, Pleasant Hill, Mo., as they appeared after the terrific hail storm that smashed 14,235 feet of double thick, and 6,465 feet of single thick, glass on his houses last month. Fortunately he was covered by insurance in the Florists' Hail Association, and he received a check for $1,225.19 from that organization in payment for his loss.

The Florists' Hail Association is certainly doing a great deal of good, and the promptness with which just claims are met by the association must surely be gratifying to those who are unfortunate enough to be hit. That this promptness is thoroughly appreciated is shown by recent acknowledgments of checks sent in settlement of losses. Mr. Fred Dorner, Lafayette, Ind., wrote: "Please accept thanks for promptness in paying loss by hail." Ed. Quir, Springfield, Mo., said. "Let me thank you for the prompt manner in which my claim has been adjusted and paid. I feel under deep obligations to the Florists' Hail Association." The Oklahoma Floral Co. wrote: "We desire to express our sincere thanks and due appreciation of your prompt settlement of our claim."

The value of protection from hail losses is now generally appreciated by all in the trade, and the secretary of the Hail Association, Mr. John G. Esler, Saddle River, N. J., is now one of the busiest men in the country, issuing policies to those who had not yet joined the Association and wish its protection.

Seasonable Hints.

If the compost for the benches has not been made up it should be done at once. In the rush of spring work there is usually little time for this purpose. If sufficient material can be had it is a good plan to make up enough to last several years. Sod from good soil should form the basis of the heap. If it makes no difference to the ground it is taken from the entire top soil can be used. Well rotted manure to the amount of one-third should be added. The heap can be built up layer by layer until complete, and usually it is best to leave the top hollow to absorb what rain may fall upon it. Of a wet season however it may be necessary to reverse this and top the compost so as to shed the water. While well rotted manure is the best to use for the purpose, fresh manure will do as well but may take longer to rot. If the soil used is heavy sand should be added in sufficient quantity to make the compost friable. Road sand when it can be obtained is probably the best. After a month or two the heap may be turned. The sod and manure should then be well rotted and the whole heap be in a pretty fine condition. It will probably not need another turning but will be ready for the houses when wanted.

There is always an accumulation of refuse about a green house which should be well taken care of. All the old plants thrown out from the benches, surplus pot plants, old trays of bulbs—all things containing dirt of any description should be thrown into one heap, the dump. Broken pots, bits of wood and stone, old iron and such other scrap should *not* go into "the dump," but be hauled off to some out of the way place. The dump will grow to considerable size in a year or two, and makes a most excellent compost of itself. If thought best it may be added to the compost heap, or may be turned and used as it is. There is nothing better for the benches, or for potting soil.

Coal ashes will lighten a heavy soil as well or better than sand. There is no better compost for carnations than when plenty of coal ashes is used, and the soil well enriched at the same time. It makes a very loose soil, soon drying out, and therefore very beneficial to the plant. Most any kind of manure will do to enrich the heap. Pure ground bone may be added in considerable quantity, but we prefer putting the bone on the benches. When the benches are filled for the first time we prefer the compost to be well enriched. Generally however, we are not so particular about this, as we change but a small part of the soil, and add manure to be stirred in. W. R. SHELMIRE.

Avondale, Pa.

Chester County Carnation Society.

This society convened in the parlor of the W. & Y. Saturday, June 3, at two o'clock. On account of the absence of President Ladley, Vice-president Edw. Swayne presided. The first important business was introduced by the committee on heating, the progress of which Mr. Larkin reported, and with the general information on the subject and explanations of the Burton and Knoch burners by Mr. Jackson, which followed. The outlook seems to be encouraging in regard to coal oil as the coming fuel. After the expression of various sentiments in regard to the lifting and non-lifting of plants, the meeting adjourned, to meet the first Saturday in July at the establishment of Isaac Larkin, near Toughkenamon, where the virtues of the two above mentioned burners will be tested. X. Y. Z.

Allamandas.

Allamandas are among the most prolific, effective and elegant greenhouse climbers we have. I say greenhouse, as they do better there than they would in the stove during the hot season. Of course they would not grow nearly so much to vine as in a house with palms, dracænas, ferns, and other subjects of like requirements, where they would have heavy shade and less air, but in a sunny greenhouse they bloom most profusely, sending forth their rich golden bell-shaped flowers all over the short jointed laterals.

Should the plants be grown in pots or tubs, they can be made deciduous, (which is all the better for the plants) by drying them off in a frost proof potting or packing shed, only taking care that they are not directly over the boilers. They require scarcely any water during the winter months; experience will teach one at a glance if the plant is in proper condition or not. If in doubt insert the thumb nail in the bark, when it should be found green, plump and full of sap.

Allamandas should be pruned back in the spring previous to placing them in their summer quarters. From the time the plant is a cutting until it is a strong plant in a 4-inch pot a light sandy soil is necessary; after that it will take the strongest of loam, made porous by a liberal mixture of rich animal manure, either horse or cow, as the plant is a vigorous feeder. When in full growth within two weeks it would root into six inches of fresh manure, placed over the pot or tub in which it is growing.

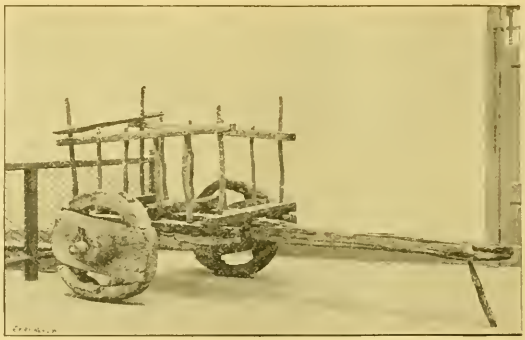
An allamanda planted in a hot shaded stove will fill a large house in a very short time, and will require to be pruned back two or three times a year. Yet still it will bloom even there and keep free from insects, but it wants the whole roof of the house to itself, keeping all the other subjects under in the dark. In such a place it rarely ever ripens enough to lose its leaves.

Some good varieties of this grand climber are A. cathartica, A. nerifolia, A. nobilis, A. Schottii, and A. Hendersonii. A. Williamsii is a new one, in habit not requiring any support, but growing in bush form, and having scented flowers three and one-half to four inches in diameter. When this plant gets a little lower priced it must be quite an acquisition to the trade decorative plants, as I believe it can be grown to be very effective in 5 and 6-inch pots. Its shoots are only about eighteen inches long. Another grand thing about it is that by resting it in the fall it can be started off again for winter decoration. DAVID ALLAN.

As It Appears Through Four Eyes.

That human nature is pretty much the same the world over and in all grades of society, and that refinement and polish are, like beauty, too often but "skin deep," was exemplified on two occasions in New York City during the past week. One of these occasions was the first free distribution of flowers by the Moderation Society at Paradise Park, the recipients being mainly the children of the street, the poor and the unfortunate. There were two thousand persons in the crowd, and they went fairly crazy in their struggle to get a handful of the blossoms, and so uncontrollable did they become that the flowers were literally torn to pieces, and the kind hearted persons in charge came near sharing a like fate. The other occasion was the ball in honor of the Princess Eulalia at Madison Square Garden. Here the mad struggle of the mob was repeated, with this difference, that the participants were from the upper crust of society, people who are supposed to represent the culture and dignity of their time, but who proved as they tore like hungry wolves at the orchids and other floral decorations of the hall that they could give points every time to their fellow creatures of Paradise Park and the Five Points Mission. The first scene was pitiable, the other one shameful.

The exhibition of hardy herbaceous plants at Short Hills, N. J., will help give an impetus to the interest in this class of plants, which is rapidly developing. That there is a more general appreciation of the value of hardy border plants and ornamental shrubbery, and a corresponding aversion to extensive bedding plant displays is undeniable, and that our suburban and country florists are awaking to the fact is easily seen in going the rounds. One notices many of these establishments with rows of hardy azaleas, irises, spiræa, phloxes, lilies, ornamental leaved nursery stock and the like, where until recently nothing could be seen outside the houses except the young stock of roses, carnations, etc. for the next year's forcing, and a general assortment of bedding plants, all indicating that their owners are beginning to realize that there is a good profit in building up and catering to the demand for this class of goods among their neighbors.



SOUTH AMERICAN OX CART AT THE WORLD'S FAIR.

School graduation time is now approaching. The pretty custom of presenting the graduates with bunches or baskets of flowers is on the increase, and our florists should let no opportunity slip to introduce or foster this custom in their neighborhood, and by so doing not only add to their own prosperity but also assist in cultivating that love for the beautiful in nature which is so large a part of a noble character. The vast majority of florists themselves are in the business not for the mere profit alone, which they find in it, but because they love it. The same amount of industry and devotion to business would, if exercised in other directions, easily bring larger material returns, but the average florist would choose, if necessary, a mere subsistence in his present calling, rather than a competency in something else.

Every year sees an increase in the number of growers who make provision for a summer crop of roses and other flowers, hitherto seldom obtainable in good quality and quantity during the months of July and August. Doubtless this move would not be made if a steady demand for good flowers during those months was not apparent. This may be an indication that the time is coming when the florist trade will be an all year round business with facilities for reasonable profit throughout the full twelve months. As soon as this is assured and our florists realize that they are not compelled to squeeze a whole year's living out of three or four holidays and a few weeks of fashionable season in winter and spring, we may expect to see winter retail prices drop to more popular figures, and then perhaps the street fakir will have no good excuse for existence.

The street fakir is a problem. The public wants him. The growers need him. But he is a menace to the standing and respectability of the flower trade. The street fakir does not put on much style; he will not deliver his goods in a gilded chariot; he supplies no fancy boxes tied with dainty ribbon; the buyer must pay cash down; no lace handkerchief goes with the bunch of violets; in fact the purchaser is lucky if he gets a piece of brown paper wrapped round his purchase, but the great army of small buyers are willing to suffer these slight inconveniences for the sake of the big difference in price. Yet we have it on the authority of some of the most fashionable florists that it is in the trade of the multitude that the best profit lies. And the store keepers in the big cities have lost a large part of the trade of the multitude, and even the upper tendom are not innocent of the charge of having patronized the street fakirs to a considerable extent, willing to forego the luxury of gilded boxes, satin ribbon and long credits, and to suffer along with the army of small buyers for the sake of the big difference in price. And this brings us back to our first proposition, viz., that human nature is pretty much the same among the high and the lowly.

South American Ox Cart.

South America contributes to the curiosities of transportation at the World's Fair by sending in the remarkably light and graceful chariot represented in the engraving herewith presented. The heavy wheels and rustic body of the vehicle are set in strong contrast by being placed in the entresol, next to the latest and lightest bicycles. This vehicle attracts considerable attention.

DO YOU WANT an alphabetical list of the chrysanthemums in commerce in America, with class and a brief accurate description of each one, and synonyms noted? You will find such a list in our trade directory and reference book.

WHEN writing our advertisers please use one of your printed business letter heads or enclose your business card.

Greenhouse Walls and Benches.

In the construction of benches and outer walls we are now using iron pipe posts. These are second hand, one-inch, common drawn pipe, which we buy for 2 cents per foot, cut into suitable lengths and drilled for bolting to planks, etc., as shown in the drawing.

To set the posts dig a hole 18 inches to 2 feet deep, with a post hole digger, so the diameter of the hole will be as small as possible, place the post in the center of the hole and fill in with concrete, having first placed one or two spikes through holes drilled in the pipe for the purpose, so they will be buried in the concrete. This prevents absolutely any movement, and after standing 48 hours is as firm as a rock, and the pipe makes a very neat and durable post. Also those posts that are usually used as columns every eight feet can be one and the same.

We find these posts take less time to set and are cheaper than any other. A ¾-inch drill is large enough for making the holes in the pipe through which to bolt the planks to it. C. RAYNER.

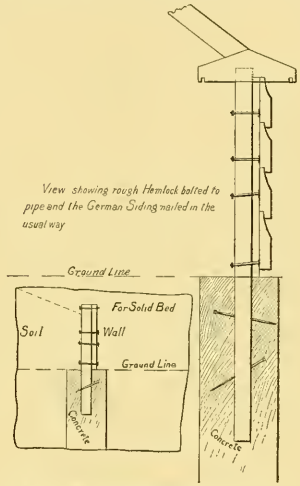
Manager Anchorage Rose Co.

Anchorage, Ky.

Washington.

The Spanish Princess Eulalia has been royally entertained during her stay in Washington. Every day a dinner or a reception has been given in her honor. On Monday she was the guest of honor at a dinner given by ex-Minister and Mrs. J. M. L. Curry. There were flowers in every direction. The stairway was covered with clusters of snowballs and green leaves. All through the parlors and dining room there were superb roses of various kinds, and on the dinner table were three plats of American Beauty roses and Asparagus plumosus. Decorative plants were freely used throughout the house in a most attractive manner. Mantels were banked and groups were placed in several of the doorways.

On Tuesday night the hospitality of the Executive Mansion was extended to the royal guests. All day the men under Mr. Henry Pfister were busily engaged arranging the plants and flowers. Never did the decorations look finer. The deep windows at the south end of the east room were banked with foliage plants, having for a center a fine specimen Stevensonia grandifolia; around the base and hiding the tub and stem of the plant were arranged ferns, pandanus, palms, marantas, etc., in a semi circle. The large east window was banked from the floor to the ceiling with fine decorative plants, arranged in a semi-circle about 25 feet wide. In the center of this group on the floor stood a fine specimen of red azalea in full flower. Through the palm leaves near the ceiling could be seen the beautiful frieze which adds so much to the beauty of this famous room. The two mantels on the east side of this room were banked with cut flowers, snowballs being used for a groundwork, in the southern one roses, pansies and lily of the valley were used to complete the arrangements. The northern one was the same except that sweet peas were used instead of the valley. The mantels were festooned with strings of Asparagus plumosus reaching to the floor, producing a very fine effect. The two corresponding mantels on the west side of the room were banked with exquisite ornamental foliage plants. A fine specimen of Ananassa sativa variegata was used for a center; around this were arranged small palms, crotons, ferns, pandanus and dracænas arranged in a very effective manner. These two windows were very fine. In the center of the room under the fine crystal chandeliers was a pyramid of foliage plants relieved by fine specimens of hydrangeas, fuchsias and Spiræa Japonica in full flower. Over the doorway entering this room was a mass of foliage plants arranged in a box or platform, from which was suspended a curtain of Asparagus plumosus. At either side of the door at the base of a column was a group of ornamental plants. Above the plants and resting on the two columns was a shield of immortelles in red, white and blue, draped with A. plumosus. In the center of the room just opposite this doorway stood a divan topped with a fine specimen of cycas;



IRON POSTS FOR GREENHOUSE WALLS AND BENCHES.

between this divan and the doorway stood the President and Mrs. Cleveland to receive the guests.

The red room mantel was filled with pots of Isolepis gracilis and Primula obconica in flower; with the large mirror at the back the effect was very good. In each of the two south windows stood a fine specimen of kentia, surrounded with tropical plants and some fine calceolarias in full flower.

The blue room was similarly decorated with the exception of a divan which stood in the center of the room, and at the top of which was a magnificent gilt vase handsomely filled with roses and orchids.

In the green room the mantels were filled with foliage plants, mingled with which were plants of Astilbe Japonica and calceolarias in full flower, which greatly relieved the dark green foliage. This room has three southern windows. In the center one stood a fine plant of Areca lutescens surrounded at the base with a few choice potted plants. In each of the other windows were fine specimens of araucaria reaching nearly to the ceiling; this, partially covered by the handsome lace curtain, produced a magnificent effect.

The table decorations carried out the idea of the Spanish colors. The centerpiece, resting on the mirror lake, simulated in Jack and Perle roses the Spanish flag (in fact there were two flags resting against each other, that guests on either side of the table could see the flag), at either end of which was a basket of Meteor roses about two feet high (this entire center-piece was about five feet long). Flanking this beyond were two gold baskets of Perle roses, then came two baskets of fine meteor roses, much lower than the others. At each end of the table gold epergnes were filled with fruit of various kinds. Asparagus plumosus was strewn on the table cloth between the various pieces and draped from the little gilt railing around the lake. At each lady's place was a corsage bouquet composed of four cattleyas with a backing of A. plumosus. For each of the gentlemen there was a single flower of Cattleya citrina. Never before did the state dinner table look as handsome. This table decoration was designed by Mr. Henry Pfister and it was executed in a creditable manner. Ices were served in the form of Spanish flags, the staffs being tied with scarlet and yellow ribbons, the small cakes and bon bons were in Spanish colors, and the tapers burned under red and yellow shades. The mantels of the dining room were banked with scarlet flowers. The windows, recesses and corners of the room were filled in with tall growing plants.

C. LESLIE REYNOLDS.

New York.

May 29 falling on Monday brought a liberal supply of stock of all kinds into the market. Trade was good, but there was no special rush on account of Decoration Day. The wholesalers were pretty well sold out, however, early in the day. There was no advance in prices.

Carnations and sweet peas were abundant and sold well. Red pæonies are in and are selling at very good prices. Harrisii and longiflorums are not plentiful and find a ready sale.

There was a number of weddings on the 1st of June, which made a stir in business for the day. There will probably be a few more, when business will settle down to the usual summer level.

The quality of the roses coming in is only fair and they grow smaller daily. La France, which usually holds out well, have been poor, but show signs of improvement. Lily of the valley is being received in limited quantity and is in good demand.

Pitcher & Manda's big establishment at Short Hills is in gala dress just now, the occasion being the public exhibition of hardy herbaceous flowers. There are fifteen acres of herbaceous beds and they make a splendid show. The pæonies cover half an acre, and the low growing phloxes, violas, doronicums, armerias, hardy candytufts, poppies, pyrethrums and a multitude of other old and new things make great expanses of brilliant color. There is plenty to attract also inside the houses. House after house of dracænas, nepenthes, anthuriums, flowering and foliage, araucarias, etc. in almost endless succession, and up at the orchid range the Cattleya Mossiæ is in full bloom. There are immense numbers of them in flower, many of them last year's importation, and the novelty and variety in colors is very remarkable. C. Mossiæ Hardyana is a striking variety, the entire flower being striped and mottled with two shades of crimson. A white Mossiæ with eight blooms is pointed out as a gem. A collector from whom nothing had been heard for five months and who had been about given up as lost has just turned up with 77 cases of a new cattleya

species, which blooms in December. Seventy cases of Odontoglossum grande have also been received from another collector.

At Brooklyn interest has centered in the three days exhibition at the Tabernacle. There was a large and comprehensive show of foliage plants, palms, etc., bedding plants and spring flowers contributed by nearly all the prominent florists and growers of this end of Long Island, and a few from New York.

Mr. Wm. Kelway, of Langport, England, is in town.

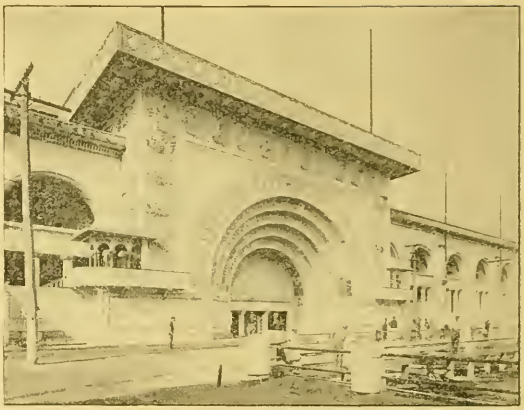
Golden Gate of Transportation Building.

The golden gate of the Transportation Building at the World's Fair is the most remarkable and beautiful feature of the building. The rich coloring and appropriate bas reliefs are finished in silver. At the right of the arch in golden letters appears the legend:

"There be three things which make a nation great and prosperous: a fertile soil, busy workshops and easy conveyance for men and goods from place to place."—Bacon.

At the right appears the following inscription from the words of one of the greatest of Englishmen:

"To all inventions, the alphabet and the printing press excepted, those inventions which abridge distance have done most for civilization."—Macauley.



GOLDEN GATE OF THE TRANSPORTATION BUILDING AT THE WORLD'S FAIR.

Boston.

Decoration Day was a red letter day with the Boston florists and growers. Trade was never better. The only mistake made was in anticipating a sharp market on carnations. The price of these took a terrible tumble on the day preceding the holiday. Two fifty to three dollars per hundred had been the advance price and they went on Monday morning for whatever they would bring, in some cases as low as fifty cents per hundred. Contrary to expectations and previous experience the colored varieties sold poorly and white had the call.

Roses were rather scarce, especially those of good quality, and prices were pretty high and firm. Of Jacqs there were not nearly enough to satisfy the call. Spiræa Japonica was in great demand, and brought better prices than at Easter. White stocks on the contrary were overstocked and were difficult to unload. Longiflorum lilies were not over-plenty, but the call for them was only moderate. Fine German valley sold for two and three dollars per hundred, and the small native as low as ten cents per hundred. Poet's narcissus was too plenty.

Out door stock was not very abundant with the exception of white lilacs. These were exactly in their prime and were used very largely in bouquets and other made-up work. Bouquets seemed to have fully retained their old time popularity for this occasion, and design work seemed to fall off somewhat. While the sale of dried-flower designs was large yet there was probably no increase in the sale of this stock over last year, and as the dealers had made preparations for an increased trade in this line there was consequently a considerable quantity of it left over. It will "keep" however. Altogether the plant men, the flower men, the dealers and the public have cause to feel satisfied with Decoration Day, for the weather was superb and everybody got what they were looking for.

June comes in with the usual rush of weddings. Unusual, in fact, for the number is remarkable, and those florists who are prepared for big decoration work are boasting that never before have they been so busy.

Nashua N. H., is naturally a pretty wide awake town. On Saturday, June 3rd, it opened its eyes wider than ever before however. The occasion of all this was a telegram received by Judge Hoitt informing him that a party of fifteen of "the boys" were on the train in Boston ready to start for the pretty New Hampshire town. The boys made no mistake. Neither did the judge, for on arrival at Nashua Junction they found him on hand with a capacious wagon all ready to convey them to the big farm in case they behaved themselves, or to the "cooler" in case they did not. The possibilities in the latter line were emphasized by the presence of the Judge's friends, the city marshall and the chief of police! The Judge's office was first visited, and then the farm with its famous trout ponds, Jersey cattle and Plymouth Rock poultry. The milk furnished by a special cow in the dairy when combined properly with the fresh laid egg was pronounced the acme of liquid accomplishments. In due time the party was escorted to the farm house, when they found a bountiful repast spread in good old New Hampshire style, and which was soon subjected to the test of good old Massachusetts appetites, the result being that the Massachusetts appetites were completely vanquished. Among the party were two pilgrims from New York known as Charlie Weathered and Koffman the Smilax King, who were given an opportunity to try the festive baked bean, and who made the best of the opportunity. Best of all the pleasant features of the visit were the kindly attentions and hospitality received at the hands of Judge Hoitt's charming lady, Mrs. Gilman, her mother, and Mrs. Daniels, the wife of the superintendent of the farm. On the return trip the party voted unanimously to go back again once a week till further notice.

Mr. Robt. E. Berry who had his leg fractured some time ago is rapidly convalescing, and reports circulated recently as to his dangerous condition are untrue.

The laws recently passed in the legislature placing all public squares and parks in the state under control of the Metropolitan Park Commission has been modified so as to exclude the city of Boston from its provisions, so City Forester Doogue will still retain the position which he has filled acceptably for so many years.

Mr. A. Koenemann of Goos & Koenemann, Nieder-walluf, Germany, is in the city taking orders for hardy perennials.

Philadelphia.

Decoration Day and the annual crop of weddings incident to the advent of June, kept things moving the past week. Good roses of all kinds were in demand, and growers sold out clean. Brides and Beauties were particularly scarce. Beauties and Belles now have their class all to themselves, as all the hybrids are done, even Jacqs being all cut out.

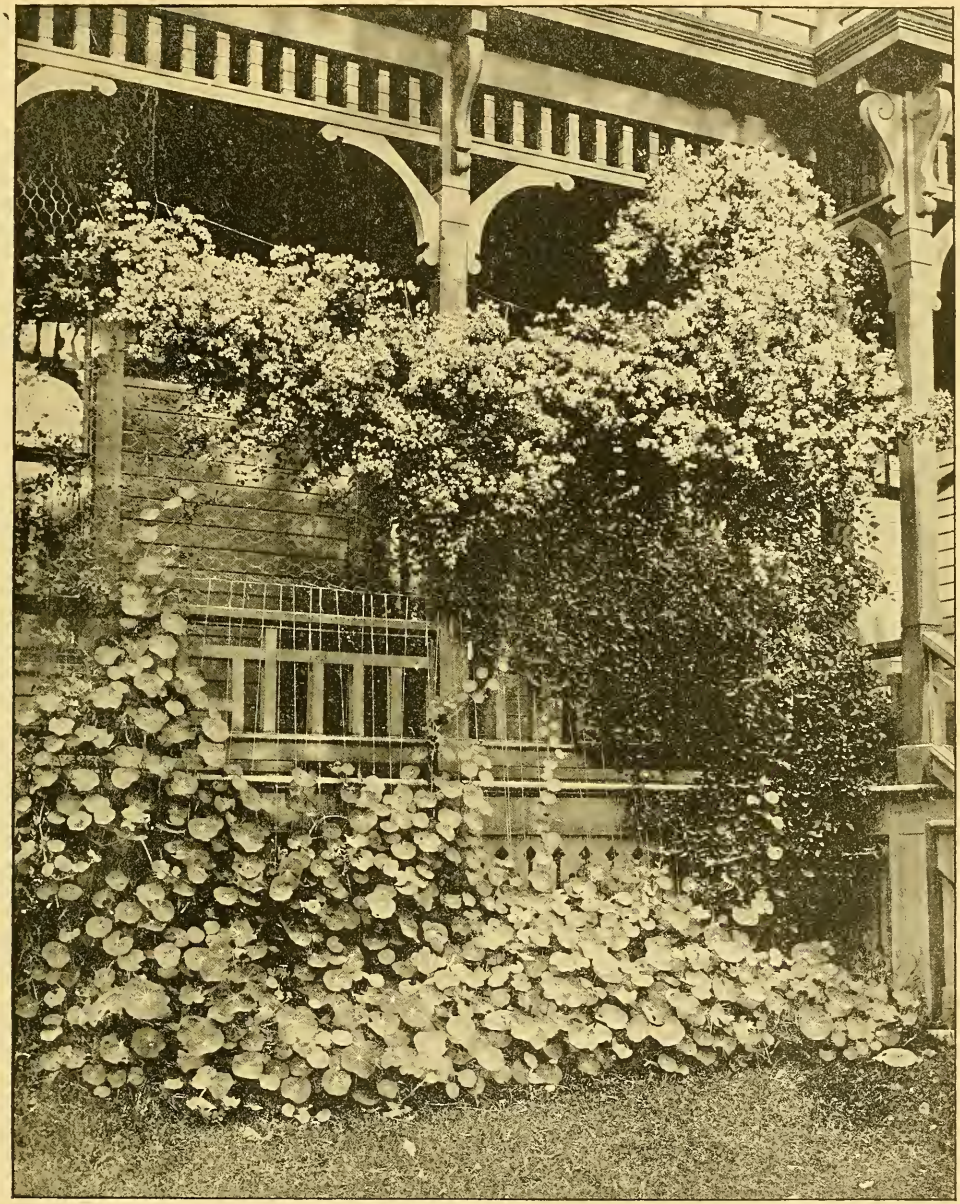
Prices are about the same, although some few things are a trifle slower. Mermets, Brides, and La France, 4 to 5; Cusins, Watteville, Wootton, 3 to 4; Perle, Niphetos, and Gontier, 2 to 3; Beauties and Belles, 20 to 25. Carnations are still very plentiful but are degenerating; $1 is asked for the first choice, and almost any price for the balance. One dealer received over 30,000 one day last week. Sweet peas are now $1 for the best, but the quality is not as good as it was, and many are sold very cheap. There are plenty of pæonies; they sell for from 50 cents to $1 a dozen.

C. F. Evans & Bro. are sending in some fine cornflowers; they have good long stems; the price is $1 a hundred.

Gardenias are sent in considerable quantities from the south, mostly from Mississippi, but they do not sell well and the returns will scarcely pay the expense of shipping.

A great many bedding plants were sold last week, but there still seems to be quite a stock on hand. The wholesale prices are about as follows: For plants in 2½-inch and 3-inch pots $4 a 100 is asked, but very often $3.50 or even $3 is taken. Geraniums and other plants in 4-inch, generally bring $8 a hundred; 6-inch stock from $2 to $2.50 a dozen. Roses in 6 to 8-inch pots sell for from $3 to $6 a dozen, while for a few extra plants $9 is asked.

Palms and rubbers, in medium sizes fit to be grown on for fall sales into 6 and 8-inch pots, are reported by palm men to



CLEMATIS PANICULATA ON A PORCH.

be very scarce. About the amount of it is that those that have such stock want to grow it on for themselves and get all there is in it.

In the building of new houses the palm men are much more active than the rose growers. W. K. Harris' six new houses will soon be completed, and Charles Ball is erecting a new range and an office building, filling his lot up to the street.

The market for this class of stock seems to be increasing even faster that it can be grown, which is certainly a very healthy state of affairs.

The ruins of Horticultural Hall remain about the same. The insurance companies have not yet appraised the damage, but it is expected they will come to an agreement soon. It was found that a number of books in the library were considerably damaged by being water soaked, but the insurance is ample to cover all loss. In the club room everything was water soaked, but the alleys were not as

much damaged as it was thought they would be, and the insurance is quite sufficient to put everything in shape again, so that the club will come out all right. K.

St. Louis.

The past week has been marked by a sharp advance in demand; the increase looked for, owing to Decoration Day and school commencements, was very gratifying. Good stock was scarce; much that came in was so injured by thrips as to be almost worthless. The home demand at neighboring points caused many shippers to let up on consignments, thus reducing the amount of stock sent in. This is one of the worst features the wholesale men have to contend with here; they will receive consignments from outside points right along, but as soon as some special occasion calls for a general demand the home market is supplied and the wholesaler receives least when he could use the most.

Sweet peas and pæonies are more than usually scarce, this being especially true of the white varieties. Several heavy orders have been placed for sweet peas that have been and can be only partially filled. The trouble is laid, to a great extent, to the prevailing wet weather. Smilax is also in short supply, and as a consequence prices remain stiff.

At the C. Young & Sons Co. two 100-foot houses have had the center beds planted with chrysanthemums; one house is in early varieties such as Gloriosum, Mrs. John Wright and so forth; the second is in standard cut flower varieties like Minnie Wanamaker, Mermaid and others. These plants have already been topped and will throw from three to five long stemmed flowers. They will all be disbudded and make a fine show in the fall.

At Robt. Hausperger's place the season is about over; the roses, principally American Beauties, have been pretty well cut to pieces for stock, there still being quite a large batch of cuttings in the sand in good shape. They expect to commence planting the coming week and will shift some Perles that have been forced this season to another bench, and will run them two years. The outside stuff was looking well, there being quite a patch of sweet peas, which are commencing to cut freely. A mushroom cellar 50x20 has just been finished and is fitted up in excellent shape for the growing of that delicate fungus. The benches will be made up and spawning started as soon as the roses are planted, some remaining empty, so as to insure a succession of crops when spawned later on. Members interested in this firm have during the past season, been growing mushrooms in the former Cotton Compress Co. building in Rock Springs, and have been astonishing visitors and the craft generally with the way they have been turning out the product, the sight really being worth going to see. It is rumored also that they have secured a cave in the southern part of the city, where the growing of mushrooms will be carried on as it is in the famous caverns surrounding Paris. It is expected that heating will be unnecessary in the cave, thus doing away with a heavy item of expense.

At Thos. Carroll's where carnations are principally grown, the season is about finished, the inside stuff has been let stand in order to keep the outside stock in good shape. There are about 30,000 plants of the standard varieties planted out and all looking well. There are also from 200 to 500 of the most promising newer varieties. Mr. Carroll is a firm believer in the carnation, and expects to go into them heavier next year. He has a nice block of lilac, which he expects to plant as a hedge around his place; it is needless to say the market will be supplied when this comes into bearing. The market for carnations during the past season has been excellent; he says that he has not lost a carnation this year, although several times he had to ease up on prices.

The Bowling Club met as usual and added three members to its list. There was quite a discussion in regard to changing the day of meeting, which was put to a vote and lost. Mr. Charles Young was then elected secretary, vice W. Ellison, who resigned on account of his inability to be present on the meeting nights.

R. F. T.

Patents Recently Granted.

Hedge trimmer, Edward C. Gordon and Alphus M. Gordon, Chetopa, Kans.; Lawn mower, Louis Clousing, Chicago; Device for transplanting trees, Daniel W. Aylworth, Cleveland, O.; Lawn mower sharpener, Zachariah T. Bush, Stanton, Mich.; Grass receptacle for lawn mowers, John V. Werner and Wm. Falker, Joliet, Ill.; Rake, Wm. T. Gallt, Port Byron, N. Y.; Fruit-tree suspender (to support limbs of trees when loaded with fruit), James Wright, Los Angeles, Cal.; Fruit gatherer and pruning implement, Silas Chambers, Waco, Texas; Fruit-picker, Aaron C. Hedden, Ithaca, N. Y.

GREENHOUSE HEATING.

BY A. B. FOWLER.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.

It is highly commended by Mr. John Thorpe and others. Postpaid, 75c.

Sent on receipt of price. Address,

AMERICAN FLORIST,
CHICAGO.

SEND FOR A COPY
—OF OUR—
TRADE DIRECTORY
AMERICAN FLORIST CO., CHICAGO

PREPARE NOW FOR OUR CONVENTION NUMBER AND COLUMBIAN SOUVENIR. SEE PAGE 1156.

FOR SALE.

Out of 4-inch pots.

Brides, Mermets, Bridesmaids, La France, Niphetos, American Beauties, Watteviles.

This stock is extra fine and cannot be beaten. Prices on application.

Holmedale Greenhouses,
P. O. Box 31. MADISON, N. J.

ROSES.

Finest stock in Northwest

Duchess of Albany,	Mme. Hoste,
La France,	Niphetos,
Catherine Mermet,	Perle,
Waban,	Sunset,
The Bride,	W. F. Bennett.

C. A. SMITH FLORAL CO.
77 7th Street, South, MINNEAPOLIS, MINN.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST. . . . . .
ANCHORAGE ROSE CO., Anchorage, Ky.

ROSES. ROSES.

Samples free on application.

Perles, Wootons, Mermets, White La France, Papa Gontier, Wabans, Souperts, Cusin, Pierre Guillot, Hermosa, Maurice Rouvier, Souv. De Clairveaux, Eva Stahrembergh, Malmaison, Souv. D'un Ami, Prof. Genivat.
2½-inch pots, $40.00 per 1000; $4.50 per 100.
Sunset, Wootton, Bride, Hoste, La France, Albany, Satrano.
2½-inch pots, $45.00 per 1000; $5.00 per 100.
Meteor, 2½-in. pots $6 00 per 100. Niphetos, James Wilson, 2½-in. pots $3.00 per 100.
Beauties, 2½-inch pots $8.00 per 100.
Sunsets, Wootons, Watteville, Bride, Hoste, in 3-in. pots, $8.00 per 100; $75.00 per 1000.
Bennetts, Beauties, Meteors, in 3-inch pots, $10.00 per 100.
Souperts, Cusins, in 3-inch pots, $7.00 per 100.

Our stock is all as fine as can be produced, clean and healthy. Samples mailed free on application.

L. L. MAY & CO.,
ST. PAUL, MINNESOTA.
Mention American Florist.

ROSES! ROSES! For FORCING.

	Per 100
American Beauty, magnificent plants, 2½-inch pots, $7 per 100; 3-inch	$10.00
Perle des Jardins, none finer, 2-inch, $4 per 100; 2½-in. $5 per 100; 3-inch	6.00
Meteor, elegant stuff for benching, 2½-inch $5; 3-inch	7.00
Mme. Watteville, good strong plants, 2½-in. $4; 3-in.	6 00
Mme. Cusin, 2½-inch $4; 3-inch	6.00
Niphetos, as fine as ever offered, 2½-in. $4; 3-in.	6.00
Mermet and Bride, 2½-in.	4.00
Papa Gontier, extra fine, 2½-in. $4; 3-in.	6.00
Bridesmaid, unquestionably the coming pink rose; fine young 2½-in. stuff	8.00
Augustine Guinoiseau (White La France), splendid stock, 2½-in.	5 00
Duchess of Albany, strong, 2½-in.	4 00
Sunset, extra fine, 2½-in.	4.00
Striped Malmaison, beautifully marbled, an exquisite variety, 2½-in.	15.00

CARNATIONS.

Lizzie McGowan, splendid plants from flats or pots	4.00
Portia, fine pot plants	3.00
Edna Craig, the finest carnation extant, 2½-in.	12.00
AMPELOPSIS VEITCHII, 3-inch pots	6.00
ASPARAGUS PLUMOSUS, 3-inch, strong	25.00
FUCHSIA Mrs. E. G. Hill. Buy plants now and stock up; the finest of all the double whites	6.00
IVY GERANIUM, Chas. Turner, the finest market variety without question	5.00
P. Crozy, brilliant scarlet, a cross between the Zonale and Ivy section, a gem tor pot culture	8.00
50 Choice Zonales in 25 sorts, mostly new varieties, our selection, just the thing for stock, for $4.00.	

ORDER AT ONCE.

E. G. HILL & CO., Richmond, Ind.

The Grand New Forcing Rose,

"American Belle."

Prices and full particulars on application.

John Burton, Chestnut Hill, Philadelphia

WATTEVILLES,
METEORS,

BRIDESMAIDS

FRANK L. MOORE,
CHATHAM, NEW JERSEY.

The New White Rose

KAISERIN AUGUSTA VICTORIA.

From 3-inch pots, $25.00 per 100.

JOHN COOK,

318 N. Charles St., BALTIMORE, MD.

Mention American Florist.

ROSES.

TEAS . . . . . $30.00 per 1000
HYBRIDS . . . . . 40.00 per 1000

Healthy plants, in 2-inch pots.
Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.
Trade list on application.

Jacob Schulz,
LOUISVILLE, KY.

ROSES.

PERLES, 2¼ inch, $5.00 per 100.
PERLES, 2¼ inch, $45.00 per 1,000.

JOHN BURTON,

Chestnut Hill, PHILADELPHIA, PA.

Hybrid Perpetual Roses,

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.

Price Lists to applicants. Address

WILLIAM H. SPOONER,
JAMAICA PLAIN, (Boston), MASS.

ROSES FOR FORCING.

Florists desiring to plant the best stock would do well to carefully consider the following Rose offers. Our stock is clean, healthy and well grown, from 3-inch pots, and **THE PRICES ARE EXCEPTIONALLY LOW.**

MME. CAROLINE TESTOUT—$12.00 per 100, from 3-inch pots. We have 1500 plants left of this superb variety and make this low price to close them out. Plants from 2½-inch pots $10.00 per 100.

PIERRE GUILLOT.—From 3-inch pots $6.00 per 100.

CHRISTINE DE NOUE.—The new red Forcing Rose. Strong plants from 3-inch pots $10.00 per 100.

THE BRIDE. **MME. CUSIN.**
CATHERINE MERMET. **PAPA GONTIER.**
3-inch pots, $6.00 per 100.

AMERICAN BEAUTY.—3-inch pots, $8.00 per 100; 2½-inch, potted May 1, $5.00 per 100.

ORDER NOW.

ROBERT SCOTT & SON,

19th and Catherine Sts., **Philadelphia, Pa.**

ROSES.

Surplus Stock that must be Sold.

I HAVE TO OFFER ABOUT

1000 Brides, 2½ and 3-inch pots	at	$ 3.50	per 100
1000 Mermets, 2½ and 3-inch pots	at	3 50	"
1000 Wattevilles, 2½ and 3-inch pots	at	3 50	"
1000 Beauties, 2 inch pots	at	4.00	"
1000 Beauties, 3½-inch pots	at	10 00	"

H. L. SUNDERBRUCH, 4th & Walnut Sts., Cincinnati, O.

Mme. Chas. Wood.

A few more fine plants for outside bedding,
at $45 00 per 1000.

FORCING ROSES IN QUANTITY NOW READY.

M. A. HUNT, Terre Haute, Ind.

THE TOTTENHAM NURSERIES Lt'd, DEDEMSVAART, HOLLAND.

(OLD FIRM A. M. C. JONGKIND CONINCK.)

Hardy home-grown bulbs and flower roots, herbaceous plants, ferns, hydrangeas, aquatics, young fruit trees rhododendrons, conifers, etc. for fall importation. Catalogue free on application to their sole agents.

C. C. ABEL & CO., P. O. Box 920, New York.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate: Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

Our Annual Convention Number.

In our Convention Number for 1893, which will also be a Columbian Souvenir as well, we shall repeat the plan of identification by portraits as inaugurated at the Convention in Washington last August. This plan solved the identification problem with such general satisfaction and was so generally made use of that we believe no explanation of its workings is now necessary.

Are you a member of the Society of American Florists? If so, do you expect to be present at the Convention in St. Louis next August? If not now a member do you expect to join while at the St. Louis meeting? If so, and you were not represented among the portraits given in our Convention Number of 1892, please send us a cabinet size photograph of yourself, being careful to write your name and address plainly on back of same. If you have no recent photograph, have one taken now, and send us a copy as soon as ready. If you intend to take your wife with you to the convention (and you ought to do so if possible) send us a copy of her photograph also, as our identification plan includes the ladies too.

This number will contain in addition to the portraits and indexes to same, a complete guide, *at date*, to the Horticultural Department of the World's Columbian Exposition at Chicago, which will certainly be visited by all members of the Convention after the adjournment of the St. Louis meeting. Diagrams of each section of the Horticultural display will be given and the location of each exhibit plainly indicated so it may be quickly located by any one. These will be accompanied by an alphabetical index to exhibitors and a classified list of exhibits, each referring to position on the diagrams; together with fine half tone plates of special features.

Full details regarding the great Horticultural Congress will also be given in this number, and it will be such a "Columbian Souvenir" as you will want to preserve for all time.

BIBLIOGRAFIA DE LA ROSA, by D. Mariano Vergara, is a volume of 312 pages, containing a fairly complete list of authors and publications treating upon the rose. The names and titles are given in their original language, the compiler's comment being in Spanish. The book is published in Madrid.

DO YOU WANT a list of the leading park superintendents of America? You will find such a list in our trade directory and reference book.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

ORCHIDS.

I am handling the finest stock of Cut Orchids grown in this country and can supply them in any quantity. Also all other Choice Flowers.

T. J. CORBREY,

Wholesale and Commission Florist,

Consignments Solicited. 45 Lake St., CHICAGO.

BOUQUET GREEN, • • • •

• • • HARDY CUT FERNS.

EVERYTHING GREEN

At H. E. HARTFORD'S,

18 Chapman Place. BOSTON.

Asparagus Plumosus Nanus.

CUT STRINGS: 6 to 10 feet long, 50 cents each. 12 to 18 feet long, $1.00 each.

In large or small quantities all the year round. The largest stock in the country.

W. H. ELLIOTT, Brighton, Mass.

We are the People!

Who? KOFFMAN,

Where? WALDEN, Orange Co., N. Y.

What? SMILAX

25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.

When? ALL THE YEAR AROUND.

Also Adiantum Cuneatum Fronds At $1.25 per 100.

And he pays the Express.

Do You Use Ferns?

Finest and Cleanest in the Land.

Hardy Dagger Cut $1 per 1,000.

G. W. CURREY & CO.

Give us a trial. NASHVILLE, TENN.

CATALOGUE PRINTING. ELECTROTYPING.

Done with expert ability for Florists Nurserymen, Seedsmen. Write to

J. Horace McFarland Co., HARRISBURG, PA.

WHOLESALE FLORISTS

La Roche & Stahl

N. E. CORNER 13th & Chestnut Sts., PHILADELPHIA.

SAMUEL S. PENNOCK,

Wholesale Florist

REMOVED TO REAR OF 42 S. 16th ST., Philadelphia, Pa.

WISCONSIN FLOWER EXCHANGE,

131 Mason St, MILWAUKEE,

WHOLESALE

Cut Flowers AND Florists' Supplies,

BULBS, ETC.

JULIUS TESMER & CO.

Manufacturers of all kinds of

Ice Boxes

AND STORE FIXTURES,

943 N. Western Ave., CHICAGO.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.

	Per 100
Perle, Gontier, Niphetos	$3.00@$4.00
Mermets, La France, Bride	4.00@ 5.00
Meteors	6.00
Carnations, short	1.00
" long	1.50
Valley, Tulips, Narcissus	2.00@ 3.00
Adiantum	1.00
Callas, Harrisii	8.00@12.00
Smilax	16.00@18.00
Paeonias	6.00
Asparagus Plumosus	50 00

In effect till next issue of this paper.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
126 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.; Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange.
45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY,
Wholesale and Commission
FLORIST,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

A. G. PRINCE & CO.,
Wholesale and Commission
FLORISTS,
45 LAKE STREET,
In Chicago Cut Flower Exchange. CHICAGO.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

Wholesale Markets.

Cut Flowers.

NEW YORK, June 6.

Roses, Gontier, Perle, Niphetos	1.00@ 3.00
" Mermet, Bride, Hoste	2.00@ 4.00
" Cusin, Watteville, Meteor	1.00@ 3.00
" Bridesmaid, La France	3.00@ 6.00
" Jacqueminot, Testout	5.00@10.00
" Beauty, Hybrids, Moss buds	5.00@20.00
Carnations	.50@ 1.00
Valley	3.00@ 5.00
Longiflorum	6.00@10.00
Cattleyas	50.00
Mignonette	1.00@ 4.00
Sweet Peas, per bunch	.10@ .20
Adiantums	1.00
Smilax	12.00@16.00

BOSTON, June 6.

Roses, Niphetos, Gontier	3.00@ 4.00
" Perle, Sunset	3.00@ 4.00
" Bride, Mermet	5.00@ 6.00
" Jacq., Hybrids	10.00@15.00
Carnations	.75@ 2.00
Longiflorum	4.00@ 6.00
Candidums	3.00@ 4.00
Lily of the valley	2.00@ 3 00
Pansies	.25
Gladioli	8.00@10.00
Pens	1.00
Spiraea	2.00
Stocks	2.00
Adiantum	1.00
Smilax	15.00@17.00
Asparagus plumosus	50.00@100.00

PHILADELPHIA, June 6.

Roses, Beauties, Belles	20.00@25.00
" La France, Mermet, Bride	3.00@ 5.00
" Cusin, Watteville	3.00@ 4.00
" Perle, Gontier, Sunset	2.00@ 3.00
Valley	3.00@ 4.00
Carnations	.75@ 1.00
Asparagus	60.00@75.00
Smilax	18.00@20.00
Adiantum	1.00
Harrisii	5.00@ 6.00
Callas	8.00@10.00
Sweet peas	.50@ 1.00
Cornflower	1.00
Paeonies	4.00@ 8.00

CHICAGO, June 6.

Roses, Perles, Niphetos Gontier	3.00@ 4.00
" Mermet, La France, Albany	4.00@ 5.00
" Brides, Wootton, Bennett	4.00@ 5.00
" Beauties	10.00@15.00
" Meteors	6.00
" Jacqs.	12.00@18.00
" Hybrids	12.00@18.00
Carnations, long	1.25
" fancy	2.00
Callas, Harrisii	8.00@12.00
Auratum	12.00@15.00
Gladiolus	10.00@15.00
Romans, Valley	3.00
Violets	1.00
Sweet Peas	1.00@ 1.50
Paeonies	4.00@ 5.00
Daffodils, tulips	3.00@ 4.00
Cape Jasmine	2.00@ 3.00
Stocks	2.00
Smilax	16.00@18.00
Adiantum	1.00
Asparagus	50.00

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

WHOLESALE FLORISTS,
JOBBERS IN . . .
. . FLORISTS' SUPPLIES,
FLORISTS' VASES.
METS,
BRIDES,
GONTIERS,
CARNATIONS,
ALWAYS ON HAND.
1 Music Hall Place,
BOSTON, MASS.
HORTICULTURAL AUCTIONEERS. . .
Mention American Florist.

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., BOSTON, MASS.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
The finest Roses, Violets and Carnations
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE
FLORIST,
1122 PINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STEET,
St. Louis, Mo.

The Seed Trade

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1893. Applications for membership should be addressed to Wm. Meggatt, chairman membership committee, Wethersfield Conn.

Seed Crop Prospects Abroad.

The long continued dry weather in Europe has been causing some alarm among the seedsmen, not only on the other side, but here also, for we still depend on Europe for a large amount of our yearly seed supply.

The wide awake seedsmen in the United States who keep their fingers constantly on the pulse of the market have been viewing this drought and consequent shortage in crops with mingled feelings—some with comparative indifference, others with a good deal of alarm—according to the stocks of different seeds which each had on hand good for another season's demands.

The practical outcome of the European reports, however, has been a decided bull movement, inaugurated in the east during the past week, and which will doubtless have an effect on prices all over the country. Beets, cabbage, radish and turnips are likely to be most affected so far as can be seen at present. The idea expressed in some quarters that it will only be the commission men that will feel the shortage must be taken with a grain of salt. The commission men are not the only men who depend on Europe for their supplies by a large majority. And what is more, if all were known, perhaps there are some in the commission business who are even more careful about the stocks they send out than many who accuse themselves of being superlatively perfect in the growing, selecting and distributing of their seeds. When it is considered that one concern in the commission business does a trade of such magnitude that by varying the proportion of one item in their box assortment they can change the available supply of that item 50,000 pounds—even 100,000 pounds if necessary—then it will readily be seen that it will not do to reckon without the commission men. Moreover, the rumors of high prices that have been floating round New York and Philadelphia the last week are evidence that the crop shortage in Europe is vitally interesting to a great many more of our seedsmen than those in the commission trade.

But just as the bulls have got steam up for a grand boost all along the line to-day (May 30) brings advices from abroad that rain has begun to fall pretty generally over Europe, and this news will be apt to have a dampening effect on the ardor of those interested in the commendable object of "whooping her up" for all she is worth. Timely rains and seasonable warmth have done much to brighten the outlook in many parts, although the damage done by the drought already is likely to make the crop rather under than over that of last year. This is especially the case in England, where the dry weather has almost destroyed the crops on the poorer soils, and as the acreage was smaller than usual the crop from the good lands will not make up the shortage. This will account for the panicky reports and quotations from London last week.

In France the weather has changed so favorably that recent estimates of the probable yield will have to be greatly modified.

In Italy and Germany the injury to crops from drought will be much less than was recently anticipated, and the estimates from Austria and Hungary indicate an average yield.

To the enterprising bulls the news will not be entirely pleasant. We get so few opportunities to put prices up a notch or two in comparison with the almost constant hammering down that it is a pity this very legitimate handle could not have been made to turn the crank to some purpose. However, there is some consolation in the fact that stocks all round are rather light, and if there are no phenomenal high prices the coming season they will doubtless be rather higher than the average. G. C. WATSON.

Phila., May 30, 1893.

VISITED CHICAGO: W. Atlee Burpee, Chas. Henderson, S. L. Morse, Chas. Sexton. John Lewis Childs and A. Blanc are expected this week.

MR. S. F. LEONARD will probably make a seed display at the Fair.

CONTINUED RAINS have injured the prospects of the Canadian pea crop.

J. W. Eldering,
CUSTOM-HOUSE BROKER and FORWARDER
78 Barclay St., New York.
Solicits the favor of your shipments for the coming season. Prompt and careful attention guaranteed. Charges reasonable.

We Grow.....
—*BULBS*—
SEGERS & CO., BULB GROWERS,
LISSE near HAARLEM, HOLLAND.
Catalogues will be mailed free upon application if not received.

GT. VAN WAVEREN & KRUYFF,
BULB GROWERS,
SASSENHEIM, Haarlem, HOLLAND.
ESTABLISHED 1866.
Mr. G. Kruyff has finished his trip through the United States and will sail for Europe on June 10 next. In order to avoid the delay caused by writing to our firm in Holland parties wanting estimates, information, etc., are invited to correspond before June 9 with
Gerard Kruyff,
ASHLAND HOUSE, FOURTH AVE., NEW YORK CITY.

Write for Wholesale List.
MICHEL PLANT AND BULB CO.,
ST. LOUIS, MO.

TRY DREER'S GARDEN SEEDS,
Plants, Bulbs & Requisites.
They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.
HENRY A. DREER, Philadelphia, Pa.

P. SEBIRE & SONS,
Nurserymen, USSY, Calvados, FRANCE.
A general assortment of Fruit Tree Stocks, such as Apple, Pear, Myrobolan Plum, Mahaleb and Mazzard Cherry, Angers Quince, Small Evergreens, Forest Trees, Ornamental Shrubs, Roses, etc. The largest stock in the country. Prices very low. Packing secured. Catalogue free. Send for quotations before placing your order elsewhere. Agents for U. S. America and Canada.
C. C. ABEL & CO., P. O. Box 920, New York.

GERANIUMS.
LILLIAN SMITH, best single scarlet.
DOUBLE GEN. GRANT (Bruant), best double scarlet, out of 4, 4½ and 5-inch pots, $8.00 to $10.00 per hundred.
COLEUS and ALTERNANTHERA, large assortment, $3.00 per hundred. Cash with order.
S. J. REUTER, Westerly R. I.

LILIUM HARRISII.
Original and largest growers of this important bulb.
OUR SPECIALTY!
True Stock. Lowest Prices. Best Quality.
F. R. PIERSON CO.,
TARRYTOWN-ON-HUDSON, NEW YORK.

FREESIA BULBS, Refracta alba, strong flowering bulbs $1.00 per 100, $9.00 per 1000.
By mail postpaid.
R. MANN & SON, Lansing, Mich.

Mention the American Florist when writing to advertisers on this page.

HYACINTHS, TULIPS,

DAFFODILS, NARCISSUS, LILIES,

And all other bulbs for forcing and outdoor, in very fine quality, at reasonable rates.

If any of our friends have not received a copy of our Catalogue of 1893, should write for one at once.

Please DO NOT DELAY ordering.

SEGERS BROTHERS,

WHOLESALE BULB GROWERS,

LISSE, near Haarlem, **HOLLAND.**

HULSEBOSCH BROS.,

BULB AND PLANT GROWERS,

OVERVEEN, near Haarlem, HOLLAND.

	Per 100	1000
Lilium Harrisii, 4 to 5-inch in circ.	$2.20	$19.00
" " 5 to 7-inch in circ.	3.00	24.00
" " 7 to 9-inch in circ.	5.25	47.00
" " 9 to 12-inch in circ.	11.00	100.00
Lilium Longiflorum 10 per cent dearer than Lilium Harrisii.		
Roman Hyacinths, extra selected	2.50	22.00
" " top roots	3.00	25.00
Narcis. Totus Albus, extra selected	1.00	7.50
" " " Grandiflor m, ext. s'le'd	1.30	11.00

Fall Wholesale Catalogue now ready. Address

A. HULSEBOSCH,

P. O. Box 3118. Warehouse 58 West Street,

NEW YORK CITY.

BENJAMIN RIMBAUD, BULB GROWER,

Quartier du Temple, Toulon, var, France.

Cable address **Benrimbaud, Toulon.**

The largest cultures in the South of France, of **WHITE ROMAN HYACINTHS,** Narcissus Paper White grandiflora, N. Double Roman, N. **Double Von Sion,** true pure yellow, and other Daffodils. **Lilium Candidum,** the largest bulbs. Freesias, Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A. Double Rosette the earliest, etc. Prices on application.

Mention American Florist

NOTICE.

NEW YORK, June 1, 1893.

I have to-day sold my seed business to my brother, G. Herrmann, who will continue the same at the old stand, 413 E. 34th Street. I will devote my time to the manufacturing of metal designs for florists; also manufacturing, importing and dealing of and in florists' supplies.

A. HERRMANN, 415 E. 34th St., New York.

NOTICE.

NEW YORK, June 1st, 1893.

I have to-day bought the seed business of my brother, A. Herrmann, and will continue the same at 413 East 34th Street.

G. HERRMANN.

NOTICE OF REMOVAL.

Since the fire which destroyed Horticultural Hall, I am located at 11th and Arch (Lippincott Building), where I shall be pleased to have my friends in the trade call or address. Happy to serve as usual. Buy or sell!

G. C. Watson,

WHOLESALE SEEDSMAN AND COMMISSION MERCHANT,

11th & Arch Sts., (Lippincott Bld'g), PHILADELPHIA, U. S. A.

JOBBER IN FORCING BULBS, SEEDS, PLANTS, AND FLORISTS' REQUISITES.

R. VAN DER SCHOOT & SON,

HILLEGOM, - HOLLAND,

Largest Growers of

HYACINTHS, TULIPS, NARCISSUS, SPIRÆA, LILIES OF THE VALLEY, ETC.

HEADQUARTERS FOR HIGH GRADE FORCING BULBS.

Wholesale Importers should write us for Prices.

OUR NEW TRADE LIST NOW READY.

We Sell Bulbs!

Special Prices on Application.

Weeber & Don

Seed Merchants and Growers,

114 Chambers St, NEW YORK.

Fresh From Japan.

Sound Bulbs of

Lil. Auratum, 7 to 9 inch, $9.00 per 100.
Lil. Rubrum, 7 to 9 inch, $9.00 per 100.

Import prices on first class Fall Bulbs way down.

W. W. BARNARD & CO.,

6 and 8 N. Clark St. CHICAGO.

Lily of the Valley Bulbs.

THE STAR BRAND

SPECIALLY RECOMMENDED FOR LATE FORCING.

We are now booking Import orders for shipment from Hamburg in October or November.

REISS & BRADY,

280 Washington Street, New York.

G. J. MOFFATT,

Manufacturer of

PAPER BAGS AND ENVELOPES

Special attention given to

Seed Bags and Catalogue Envelopes.

NEW HAVEN, CONN.

Mention American Florist.

Chicago.

Business still continues fairly good, a large quantity of flowers being sold, though prices are generally low and very fluctuating. At the present time carnations are coming in in immense quantities, causing a glut of these flowers, which reacts on other stuff. The average price for carnations is $1, but some good fancies bring $2. Roses are getting very soft and small and there is quite a strong tendency to mildew in many cases. The Beauties and Perles looked better than most other varieties, but they all need careful packing for shipment.

Lilac is nearly over and very few shrub blooms are brought in since Decoration Day. Pæonies, both red and white, are quite plentiful, and gladiolus is coming in more freely. Violets are extremely scarce and the few in the market are very poor. Unusually fine double poet's narcissus are offered, but in consequence of the glut of carnations they do not bring a high price. Adiantum is not very plentiful; smilax remains equal to the demand. Stocks are coming in quite freely; though the price is moderate they sell well, the white being freely used in funeral work, while the lavender and pink are popular for decorating the store windows.

The coming of the Infanta is giving a little impetus to the trade. P. J. Hauswirth had a fine dinner decoration in her honor on Wednesday and this will be followed by a variety of other entertainments.

Among the visitors to Chicago at present are Mr. and Mrs. F. Sander and Alfred Dimmock of St. Albans, England; Robert Craig of Philadelphia, Wm. Hamilton of Allegheny, Pa.; E. N. Reasoner, Oneco, Fla.

Mr. A. H. Ewing has returned again to Toronto, leaving Mr. A. Gilchrist in charge of Ontario's floricultural display.

The American Association of Nurserymen is now in annual session in Assembly Hall at the World's Fair.

John C. Moninger, the well known manufacturer of greenhouse building material, died early this week, aged 38 years. Mr. Moninger was a very genial gentleman, as well as an enterprising business man, and had made many warm friends in the trade who will be deeply pained to learn of his untimely death.

KANSAS CITY, MO.—The Probst Floral Co. will build two new greenhouses this summer.

SAN FRANCISCO, CAL.—D. B. Wier, formerly of Lacon, Ill., well known as a practical horticulturist and writer, died here recently. Mr. Wier was chiefly interested in fruit culture.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—By experienced gardener; single, age 35; best of references; either private or commercial. Address
FRANK OTTO, 583 Lincoln Ave., Chicago.

SITUATION WANTED—As gardener; single; have had 20 years' experience in all branches of greenhouse work; good propagator. Best of references. Please state wages. Address K G.
687 70th street, Parkside, Chicago.

SITUATION WANTED—At once, by a gardener and florist. A good and quick designer—florist work preferred; 8 years' experience besides youth; 22 years old. Best of reference. Address
C W, 154 Wilmot Ave., Chicago.

SITUATION WANTED—As superintendent of cemetery or park, as landscape gardener or foreman in public park; have had 15 years' experience in general horticulture; best of references. Address
SAXTON, care American Florist.

SITUATION WANTED—By a first-class gardener; married, two grown children; 20 years' experience in this country in the growing of roses and general stock of plants. The best of references. Address
M C, care American Florist, Chicago.

SITUATION WANTED—By first-class florist and landscape gardener; married, two in family; 15 years' experience on private places. Best of references. Foreman on private place preferred. Address
H J, care American Florist, Chicago.

WANTED—A propagator; none but best need apply.
R. J. MENDENHALL, Minneapolis, Minn.

WANTED—A few hundred rooted geraniums, double or single, 3-in. pots preferred. Address, stating size and price, VAUGHAN'S SEED STORE, Chicago.

WANTED—Single man of energy and ability for roses and cut flower stock. Address with terms and experience. J. T. WILLIAMSON,
Prop. La Rose Gardens, Memphis, Tenn.

WANTED—Florist with some experience in greenhouse work, to work under foreman; wages $20 per month. Address
J. A. PETERSON, 41 W. 4th St., Cincinnati, O.

WANTED—Three good men in greenhouses; must be sober, able and energetic. Address with terms, experience and references to
WILLIAM PLUMB, Managr. West View Floral Co., West Atlanta, Georgia.

WANTED—For a commercial place, first-class man on roses, carnations, violets and chrysanthemums. References required. State terms. Call at greenhouses or Address C. S. FAOTT,
Box 582, Downers Grove, Ill.

WANTED—If Robt. Caughley, formerly in the employ of S. D. Bradford, Colorado Springs, Colo., will communicate with him he will learn something to his interest. Mr. Caughley when last heard from was in St. Paul, Minn. S. D. BRADFORD.

WANTED—Protestant, American, German, Scotch or Swede; must be steady, sober, reliable, honest, and have practical experience in making of mushroom beds and taking care of N. H. grapes. Unaccommodating or conceited loafers need not apply. Fair wages and per cent. of our established business to a worthy man willing to work hard to my interest.
ALFRED E. BAKER, box 2672, West Chester, Phila., Pa.

TO RENT—6 houses in Chicago with 11,000 feet of glass, stocked with forcing stuff, roses, carnations, violets, smilax, etc. Address
R P, care American Florist.

FOR SALE—3,000 feet of 4-inch Hitchings pipe; also valves, tanks and other fittings. Terms cash. Half list price. Address B. SCHROEDER,
114 Elmwood Ave., Detroit, Mich.

FOR SALE CHEAP—Second hand No. 1 Exeter boiler, 18 sections, 25 horse power, as good as new; steam gauge, water gauge all complete. Price $300. This is half the price of new. Address
J. G. BURROW, Fishkill, N. Y.

FOR SALE—Controlling interest in old established seed store. Contracts for 1893 all placed. Large growers of onion sets. Must get out of business on account of failure of my eyes. Suitable terms on good security. Address
SEEDSMAN, care American Florist.

FOR SALE—An established retail florist business on one of the best business streets of Chicago. For anyone wishing to go into the business this is an opportunity seldom offered. Investigate this. Good reasons for selling. No fancy price asked.
W M H, care American Florist, Chicago.

FOR SALE—A well established florist business; 6 greenhouses, heated by hot water; 3½ acres land; 8 room dwelling; no competition in 25 miles; well located; good home trade, also shipping trade. $2,500; $1,000 cash, balance on long time. Cochran is 25 miles from Cincinnati, O. S. HUMPELD, Cochran, Ind.

SPLENDID OPPORTUNITY—To let on lease for eight or ten years, a large property for greenhouses in most desirable locality; extra good home market; church near by, street cars running past premises, and within twenty minutes' ride of public buildings. Address J. W. Moore, St. Vincents' Seminary, Germantown, Philadelphia, Pa.

FOR SALE.

Nice greenhouse in the most fashionable part of the city. Sell at a bargain. Cost to run it per month, including rent of $12.00, is $100.00. Receipts will average $300.00 per month, and can be increased. Good reasons for selling. Address
W. B. LEEDY & Co., Birmingham, Ala.

FOR SALE.

Will sell, to best cash offer received before July 1st, the following:

1 Weathered boiler No. 5, 900 feet 4-inch pipe, 800 feet 1-inch pipe, 2,500 square feet of glass 10x12 single, 30 hotbed sash 3x6.

S. B. FIELD, Roselle, N. J.

FOR SALE OR RENT.

Greenhouses containing 8,000 square ft. of glass, heated by hot water; good trade in town of 12,000 inhabitants near Chicago; house of six large rooms, also good barn. If you have money and want a bargain, apply for particulars to
JOHN S. FORSTER, 738 Oak Ave., Evanston, Ill.

FOR SALE.

We offer our greenhouses and label business for sale, including the land on which the greenhouses stand. For information, inquire at the office of
H. W. WILLIAMS & SONS,
BATAVIA, ILL.

FOR SALE.

The entire collection of plants, over 4000 pots, in a private greenhouse, including many valuable specimens. Apply to undersigned, or to the gardener at No. 601 N Main street.

T. D. ROBERTSON, Rockford, Ill.

FOR SALE.

The Oldest Seed and Florists' Stand in New Orleans

on account of retiring from store business, a large selected stock and good patronage from the best class of customers in the city. Address
R. E. SIMONS,
NEW ORLEANS, LA.

FOR SALE OR LEASE.

A BARGAIN.

One of the best paying florist's business in the west, for sale or lease on easy terms (see AMERICAN FLORIST of May 25th, page 1113). For full particulars address
HANS NIELSON, St. Joseph, Mo

FOR SALE OR TO RENT.

The following greenhouse property, situated on the outskirts of Springfield, the City of Houses; or will sell Greenhouses, Stock and Fixtures and give ten years' lease of 2 acres land. Ten houses in all—5 houses, 10 feet wide, 65 feet long; 4 houses, 18 feet wide, 65 feet long; 1 house, 18 feet wide, 65 feet long. Steam plant! New double Florida Boiler. Stock in good condition, with a large and extra good home market. This is an opportunity in a life-time, as present owner has other interests to look after. If you are looking for a chance, apply at once to
N. D. WINTER,
5 Elm Street, SPRINGFIELD, MASS.

TRADE MARKS. COPYRIGHTS.

SOLICITOR OF U. S. AND FOREIGN PATENTS.
Atlantic Building, Washington, D. C.
(Send sketch or model for free examination as to patentability.)

IF YOU WANT A GOOD STAKE THAT WILL NOT ROT, HARBOR INSECTS, ALMOST INVISIBLE. LAST YEARS, TRY OUR PATENT GALVANIZED WIRE SCREW PLANT STAKE.

Address **WM. STOPHER,** Vassar College, POUGHKEEPSIE, N. Y.
Mention American Florist.

PANSIES from flats, showing flower, fine strain, $1.00 per 100; $7.50 per 1000.
Achillea "The Pearl," from flats, $2.00 per 100.
Rooted Cuttings Evergreens and Shrubs, $2 to $4 per 100.

ROGERS NURSERIES, Moorestown, N. J.
Mention American Florist.

Special Offer

FOR THE NEXT THIRTY DAYS.

LATANIA BORBONICA.
5-inch pots, strong, per doz., $9.00,
4-inch " " " $6.00.
3-inch " " " $2.00; per 100, $15.00.
2½-inch pots, strong, per doz., $1.00; per 100, $8.00.

PANDANUS UTILIS.
5-inch pots, extra strong, per doz., $6.00.
4-inch " " " " $4.00.
3-inch " " " " $2.00.

ARECA LUTESCENS, 2½-in. pots per 100 $10.

ASPARAGUS TENUISSIMUS.
3-in. pots, per doz., $1.00; per 100, $8.00.
2½-in. pots, per doz., 50c; per 100, $4.00.

CYPERUS ALTERNIFOLIUS.
4-inch pots, per doz., $1.25.
3-inch pots, per doz., 75c.
2-inch pots, per doz., 50c.

Address **NATHAN SMITH & SON,**
167 W. Maumee St.,
ADRIAN, MICH.

Association "Flora"

BOSKOOP, HOLLAND,

NURSERIES.

Roses, Clematis, Shrubs, Azaleas, Palms, Herbaceous Plants, Bulbs, Etc.

Catalogue on Application.

P. OUWERKERK,
206 Cambridge Ave., JERSEY CITY, N. J.

ROSES,

CARNATIONS AND VIOLETS
STRONG PLANTS,
WRITE FOR PRICES.

Kemble Floral Co.,
OSKALOOSA, IOWA.

CANNAS.

Pot grown first-class plants.

ALPHONSE BOUVIER, J. D. CABOS, GUSTAV SENNHOLZ, $4 per doz.

These fine pot plants are far superior to the single eyes usually sold by florists.

W. W. COLES, Kokomo, Ind.

ROEMER'S SUPERB PRIZE PANSIES

The finest strain of Pansies in the World.

Introducer and Grower of all the leading Novelties.

Catalogue free on application.

FRED ROEMER, SEED GROWER,
QUEDLINBURG, GERMANY.

Always mention the AMERCAN FLORIST when writing to advertisers.

SMILAX.

Good, stocky little plants once reset, they can be packed very light and are cheap of transportation, cheap in price and not dear at the end. A sample will cost only 10 cts. and convince you. **Price, per 100 75 cts.; per 1000 $6.00.**

Watch for my pansy ad. soon, it will have some new facts.

TERMS CASH

L. B. 496. **ALBERT M. HERR, LANCASTER, PA.**

Carnations All Sold

We still have some Fine Plants of

The Best Yellow Canna, **NELLIE BOWDEN,** 75c each. $8.00 per dozen

JOHN McGOWAN, - - Orange, N. J.

ROSES AND CARNATIONS.

The Largest and Finest Stock in the Northwest ever offered at the following prices:

ROSES.—American Beauties, from 2½ inch pots, $7.00 per 100; from 3 inch pots, $9.00, and from 4 inch pots, $12.00 per 100.
Meteor, from 2½ inch pots, $5.00 per 100; from 3 inch pots, $8.00, and from 4 inch pots, $10.00 per 100.
Perles, LaFrance, Mermet, Bride and Niphetos, from 2½ inch pots, $4.00 per 100; from 3 inch pots $5.00, and from 4 inch pots $9.00 per 100. Per 1,000, send for special quotations.

CARNATIONS.—The leading varieties, from inch pots, $3.00 per 100; per 1,000, from flats, $20.

BEDDING PLANTS.—Large stock in full bloom.

CUT FLOWERS.—At lowest market prices.

Telegraph Orders Promptly Attended To.

CHRIST. HANSEN, Wholesale Florist, St. Paul, Minn.

Siebrecht & Wadley,

ROSE HILL NURSERIES,

NEW ROCHELLE, N. Y.

Palms, **ORCHIDS** Roses,

and New Plants.

FRESH DRACAENA CANES NOW READY.

ORCHIDS.

The Finest Stock in the World.

SANDER'S,
ST. ALBANS,
ENGLAND.

Thirty minutes from London.

Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City.

HEADQUARTERS for WATER LILIES

Now is the time to plant all tender and tropical varieties without risk and loss. Secure your stock early. Prices moderate. Send for Catalogue.

WM. TRICKER, DONGAN HILLS, NEW YORK.

6,000 Alternanthera paronychioides major and aurea, at $5.00 per 100.
6,000 Echeveria glauca, 2½ to 3-inches in diameter, $3.00 per 100; $25.00 per 1000.
3,000 English Ivies, 3 to 4 feet high, from 3½-inch pots, $5.00 per 100.
5,000 Smilax, from 2-inch pots, $2.00 per 100.
5,000 Mountain Daisies, red and white, $2.50 per 100.
Coleus Golden Bedder and Verschaffeltii, from 2½-inch pots, $3.00 per 100; from 3½-inch pots, $4.00 per 100.

JOHN RECK, BRIDGEPORT, CONN.

Surplus Stock.

A large lot of the leading sorts of Coleus, including large fine plants of Golden Bedder, and about 25 other sorts, at $2.25 per 100. Hardy Scarlet Salvia 60 cents a dozen. Heliotropes 50 cents a dozen. Sweet Alyssum 40 cents a dozen. Dusty Miller $4.00 a 100. Florists' Pinks, double white and pink, $4.00 a 100. Pansies, large plants, $2.00 a 100. Also other bedding plants.

M. TRITSCHLER, Nashville, Tenn.

Cycas Revoluta

The Largest and Best Selected Stock of Cycas Revoluta, fronds and roots cut off, true long leaved variety, now on hand.

For general Japanese and Australian stock, apply to

F. GONZALEZ & CO.,
303-312 Wayne St., SAN FRANCISCO, CAL.
☞ Send for catalogue

FIELD GROWN CARNATIONS.

50,000 Ready in the Fall.

W. R. SHELMIRE,
CHESTER CO., AVONDALE, PA.
Correspondence Solicited.

CARNATIONS.

A SPECIALTY.

Full stock of all the new and leading varieties. Rooted Cuttings, Young Plants, and Field Grown Plants in season. Get our prices before purchasing.

GEO. HANCOCK,
GRAND HAVEN, MICH.

Carnation Daybreak.

A few hundred fine boxed-off plants of this valuable sort . . . . . $5.00 per 100
PURITAN, ditto . . . . . 4.00 "
NELLIE LEWIS, ditto. . . . . 4.00 "
All ready for immediate planting in open ground. Order at once.

H. E. CHITTY, Paterson, N. J.

CARNATIONS

Rooted Cuttings all sold or planted out.

FIELD GROWN PLANTS IN SEASON.

Correspondence Solicited.

C. J. PENNOCK, THE PINES,
Chester Co., KENNETT SQUARE, PA.

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

ROOTED CUTTINGS of CARNATIONS

By the Wholesale.

Ready now. This is the best time for intending buyers to supply themselves. offer them at moderate prices. Send for Price List. Address

JOSEPH RENARD, Unionville, Chester Co., Pa.

ROOTED CUTTINGS

Of the Best Old and Most Promising new varieties of

CARNATIONS.

Write for a catalogue and send list of wants for an estimate.

J. J. Styer,
CONCORDVILLE, PA.

Recent Legal Decisions.

Liability of carriers for injury to freight resulting from delay.

While the rule is that a common carrier is an insurer of property when received for shipment, and will not be excused for its nondelivery unless it be shown that its loss was occasioned by an act of God or the public enemy, or resulted from inherent vice in the property, the rule is different when the property is transported and delivered, and it is sought to hold the carrier liable for injury resulting from delay. Where the property is actually transported and delivered, but the time of delivery was delayed, if resulting from causes beyond the control of the carrier, may be excused. If, under such circumstances the carrier exercises due care for the protection and preservation of the property, he will not be liable.

International & G. N. R. Co. vs Hynes. Court of Civil Appeals of Texas. 21 S. W. Rep. 622.

The interests of partners in firm property.

Everything rests in confidence between partners, and lies in account while the partnership continues; and, if one of them sell or take or destroy the joint effects, all that can be done is to charge him the value in account. The interest of partners in particular chattels cannot be determined by the number of partners, or their share of the profits; nor can one of them claim a division of specific articles. The account must be taken of the whole partnership, so as to ascertain the clear interest of each partner. Until such account be taken, it cannot be told whether the partner who, for his own benefit, sold or consumed the partnership property was not justifiable, inasmuch as his interest in the joint stock may have exceeded the value of the property. As respects a thing sold, the assignee stands in the shoes of his assignor.

White vs Campbell. Supreme Court of Rhode Island. 26 At. Rep, 40.

FILL UP HOUSES FOR SUMMER.

Fine young plants, potted now, will be worth many times the money by autumn.

ALL EXTRA STRONG.

PALMS.	Per 100
Latania Borbonica, 2 inch pots. . .	$ 5.00
Cocos Plumosa, or Weddelliana, 2 inch pots	10.00
Cocos Weddelliana, 3 inch pots	20.00
Areca Baueri, 3 inch pots	10.00
Cocos Plumosa and Weddelliana, strong, from seed boxes	5.00
Latania Borbonica, from seed boxes.	2.00
ORNAMENTAL FOLIAGE.	
Dracæna Terminalis, 2 inch pots	6.00
Dracæna, 20 finest sorts, 2 inch pots . . .	10.00
Ornamental Foliage, 25 beautiful varieties, 2 and 3 inch pots	10.00
Crotons, 20 very fine sorts, 3 inch pots . . .	15.00
Caladiums, 20 very fine sorts, 2 inch pots . .	10.00
Pandanus Utilis, 4 inch pots	25.00
Musa Ensete, 4 inch pots	20.00
FLOWERING PLANTS.	
Citrus Otahitiensis, 2 inch	10.00
" " extra, in 5 inch	25.00
Achimenes, 6 fine colors, mxd, 5-in. pots, full	25.00
Wistaria Chinensis, 2 inch	5.00

JOHN H. LEY,
ANACOSTIA, D. C.
Mention American Florist.

CHRYSANTHEMUMS.

2½ inch, $4 per 100.

SMILAX—1st class, from 2½ inch pots, $2.50 per 100; $20.00 per 1,000. Samples free.

Address **J. G. Burrow,**
FISHKILL, N. Y.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

The three leading Florist Flowers:

CHRYSANTHEMUMS, CARNATIONS AND ROSES.

ALL THE NEW AND SELECTED STANDARD VARIETIES. . . .

My stock of all are as fine as can be produced at reasonable rates. Complete list of these will be mailed to all applicants in the trade.

JOHN N. MAY, Summit, N. J.

CANNA EXPLORATEUR CRAMPBEL

Flower as large as BOUVIER; color a clear vermilion scarlet, tinted with crimson spots distributed evenly over the petals. Flower spikes large. We claim it to be the largest and most showy deep red flower of all the new Crozy kinds. **Per dozen, $6.00; per 100, $40 00.**

ALPHONSE BOUVIER and J. D. CABOS, per dozen, $4.00.
FLORENCE VAUGHAN, the sensation of the year, each, $2.50.

J. C. VAUGHAN

NEW YORK: 26 BARCLAY STREET. CHICAGO: P. O. BOX 688.

IMPORTED ORCHIDS.

Cattleya Mossiæ just arrived in splendid condition. East Indian Orchids have arrived. Among them will be a grand lot of Vanda Cœrulea, Cypripedium Insigne, collected in the original district from which all the choicest varieties have come, Cymbidium Eburneum, C. Mastersii, C. Devonianum, C. Giganteum. Also Dendrobium Nobile, D. Farmersii, D. Chrysotoxum, D. Thyrsiflorum, D. Aureum, D. Densiflorum, D. Devonianum, D. Cambridgeanum and other Dendrobes, together with a small lot of Phajus Wallichii and Pleiones. Prices of the above on application.

Of Established Orchids a fine selected stock of Cattleya Trianæ, well established in 6-inch pots and will produce four to eight flowers each next winter. Many very choice varieties will be found among them. Single plants $2.50; 12 for $25.00; 100 for $175.00. Terms sixty days to buyers with satisfactory references, or 5 per cent discount for cash.

IG. FORSTERMAN, NEWTOWN, N. Y.

HOW TO GROW CUT FLOWERS.

A PRACTICAL TREATISE ON

THE CULTIVATION OF THE ROSE,

And Other Flowering Plants for Cut Flowers, sent to any address upon receipt of $2.00. **M. A. HUNT, Terre Haute, Ind.**

VERBENAS.

In Bud and Bloom. Per 100 P. 1000

Mammoth and general collection, choice assortment, all colors, fine bushy plants....$ 3.00 $25.00

ROSES—Fine healthy stock.

Perles, Mermets, The Bride, Sunset, Papa Gontier, Niphetos, Bon silene, La France, Souv. d'un Ami, Duchess of Albany, Mad. Cusin, Mad. de Watteville 5.00 45.00

Hybrid Perpetual Roses in bud and bloom, from 5 inch pots, strong plants. 25.00

Tea Roses, in bud and bloom, from 4 and 5 inch pots, strong. .... $10.00 and 15.00

Geraniums, double and single, fine assortment of varieties from 2½ inch pots. 4.00 35.00

From 3½ inch pots..... 8.00

Heliotrope, strong bushy plants, 3½ in. pots 6.00

Vinca, variegated, strong, 1 year old, bushy 10.00

Lots of other Fine Stock.

Send for new list.

WOOD BROTHERS,
Fishkill, N. Y.

PLANTS.

Alternanthera, Versicolor, Tricolor and Aurea Nana .....per 100	$2.50
Alternanthera Paronychioides. ..... "	3.00
Coleus, best old and new .... (200 for $5.00) "	3.00
Fuchsia Trailing Queen .... per doz.	.50
Begonia assorted ..... per 100	$4.00
Mexican Primroses, 3 varieties. ..... "	3.00
Fuchsia, best varieties..... "	3.00
" Storm King and Phenomenal.... "	4.00
Echeveria Glauca..... "3 &	4.00
" Extensa Globosa, for centers, plants six inches across.....each.	.25

Price List on Application

ROBT. S. BROWN & SONS,
Box 99, Kansas City, Mo.

Cyclamens.

	Doz.	Hundred
Select strains, in 3½-in pots	$1.00	$8.00
H. P. Roses. Select named kinds....	1.50	10.00
Smilax, stocky, well-hardened Seedlings, ... per thousand,	6.00	.75

F. A. BALLER,
BLOOMINGTON, ILL.

COLEUS.

Standard Sorts, $2 25 per 100; $20 per 1000.

My Specialty: Golden Bedder and Verschaffelt, $2.50 per 100; $22.50 per 1,000; 2½ inch pots; ready now. Any quantity. Cash with order.

C. F. FAIRFIELD.
SPRINGFIELD, MASS.

GERANIUMS.

Fine plants and varieties, 4 inch pots, per 100, $7 50.

Tuberous Begonias, per 100, $3.00 and $2.50. Should be ordered now.

BRAUER & RICHTER,
McCONNELSVILLE, OHIO.

NEW BEDDING BEGONIA

THURSTONII.

Strong plants, $1.00 per dozen; $6.00 per hundred

J. E. BONSALL & SON, 308 Garfield Ave., Salem, O

Summer Smilax.

FOR JUNE WEDDINGS.

Attention Decorators! I now offer to the trade a new and beautiful Evergreen which I have named "Summer Smilax." It is an exquisitely lovely evergreen tree and I am confident will prove as valuable to the trade as my famous "Wild Smilax." Branches are broad and flat, foliage dense, glossy dark green.

WHAT THE TRADE SAYS:

Your Summer Smilax is very satisfactory.
MISS FLICK, Ft. Wayne, Ind.

Send me four cases Summer Smilax. Sample received. P. J. HAUSWIRTH, Chicago.

Send me another case of that Green Loveliness.
MRS. E. SUDER, Toledo, O.

It's a daisy and answers our purpose finely.
C. L. BRUNSON & CO., Paducah, Ky.

PRICE, $6.00 PER 16 CUBIC FOOT CASE ON CARS AT EVERGREEN.

Also Palm Leaves, $2.50 per 100. Palm Crowns, $3.00 to $10.00 per doz. Cut Dagger and Fancy Ferns, $1.50 per 1000. Extra Fine Stock.
TERMS: Cash with order.

For sale by
CALDWELL, *THE WOODSMAN, EVERGREEN, ALA.*
Also **MARSCHUETZ & CO., Philadelphia. AUG. ROLKER & SONS, New York.**

"CHRYS-COLA."

COLEUS.

Golden Bedder, Verschaffeltii, Golden Verschaffeltii, Hero, Yeddo, Firebrand, Firecrest, J. Goode, Chicago Bedder. Plants from 2¼ and 2-in. pots.

$1.75 per 100. $15.00 per 1000.

—CASH WITH ORDER.—

If order cannot be filled, will notify by wire.

S. B. FIELD,
ROSELLE, N. J.

WORLD'S FAIR

FLORISTS SHOULD NOT FAIL

to see my Rhododendron Exhibit. Plot on Wooded Island convenient to principal buildings; enclosed in large tent during June.

FRED. W. KELSEY, New York.

SAMUEL HENSHAW, LANDSCAPE GARDENER,

West New Brighton, N. Y.

Arrangement and planting of grounds. Advice given in remodeling old places. Plans and estimates on application.

100,000 SMILAX PLANTS.

From 2-inch pots, for June delivery, at $2 per 100; $15 per 1000. Terms strictly cash. Orders booked now. Address

FRED SCHNEIDER, Wholesale Florist, WYOMING Co., ATTICA, N. Y.

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

LOUIS BOEHMER. **ALFRED UNGER.**

Extract of Wholesale Catalogue 1893-'94.

L. BOEHMER & CO.,

4, 5 & 28 Bluff, Yokohama, Japan.

	Per 1000	
Lilium Auratum, 5 to 7 inches in circumference	$ 15.00	silver
" " 7 to 9 " "	18 00	"
" " 9 to 11 " "	30.00	"
" " 11 to 13 " "	50.00	"
" " rubro vittatum, 6 to 7 inches	250.00	"
" " " " 7 to 9 inches	275.00	"
" " macranthum (magnificent large flower) 7 to 9 inches	50.00	"
" " " 9 to 12 inches	120.00	"
" Longiflorum eximium, 4 to 6 inches	15.00	"
" " " 6 to 8 "	20.00	"
" " " 8 to 10 "	30.00	"
Iris Kæmpferi, strong clumps, best selected, 100 varieties	75.00	"
Nerine Japonica, the pink Japanese Spider Lily	30.00	"
Pæonia Arborea, 100 best varieties, double and half double	300.00	"
" Herbacea, new varieties	250.00	"
" " common varieties	150.00	"

Season begins in August. **Send orders early therefore. PRICES ARE FREE ON BOARD IN YOKOHAMA.** 100 gold dollars are about $145.00 silver. **Freight** to all United States points per Northern Pacific Railroad Co., 1½ cents gold per pound to San Francisco. $8 to $10 gold per ton, 40 cubic feet measurement.

PAYMENT. Orders sent direct to us must be accompanied by a remittance (baukers draft or other usual credit) to the full value. If freight is to be prepaid the remittance should cover that cost also. Our bankers are the Hong Kong and Shanghai Banking Corporation. Agencies: San Francisco and New York. Please write for Catalogues. We are the **oldest** and only European firm in the country, established 1882. The most of Japanese novelties were introduced by us.

CYCAS REVOLUTA, the true long leaved variety, stems from 6 inches to 4 feet, are collected by Mr. A. Unger every year. 1000 pounds, fronds and roots cut off, $50.00 silver. Please send your orders before November.

CABLE ADDRESS: **BOEHMER, YOKOHAMA.**

ROSES.

MME. CAROLINE TESTOUT—The beautiful new hybrid Tea Rose, $25.00 per 100; $200.00 per 1,000,

HEINRICH SCHULTHEIS—An excellent pink hybrid Remontant Rose for very early forcing, $7.00 per 100; $60,00 per 1,000.

Chrysanthemums.

MRS. CRAIG LIPPINCOTT—Awarded a silver medal at Philadelphia, November, 1892. Yellow in color, VERY EARLY; large flower, broad petals. $3.00 per dozen.

TUXEDO—A beautiful orange colored flower, the best of this color for cut flowers. This should be grown in large quantities, so that the admirers of the Princeton College boys can get a color to their taste. $1.50 per dozen; $10.00 per 100.

EDWIN LONSDALE,

CHESTNUT HILL P. O. **PHILADELPHIA, PA.**

Alternanthera Aurea Nana.

Per 100	$ 2.50
Per 250	5 00
Per 1000	20.00

NATHAN SMITH & SON,
167 W. Maumee St., ADRIAN, MICH.

MAGNOLIAS

OBOVATA GRACILIS AND PURPUREA.

Fine, bushy plants, 3 to 8 feet, from $25.00 to $200.00 per 100.

Send for descriptive catalogue and wholesale price list free to all in the trade.

SAMUEL C. MOON,
MORRISVILLE, Bucks Co. PA.
Mention American Florist.

THE WABASH

. . . WILL BE THE . . .

"FLORISTS LINE"

TO THE **ST. LOUIS**

CONVENTION, as well as returning.

Write **F. A. PALMER,** Gen'l Pass. Agt., **201 Clark Street, CHICAGO.**

It is expected a party will be made up leaving Chicago about August 7.

Please mention the American Florist every time you write any of the advertisers on this page.

San Francisco.

The ninth semi-annual flower show of the California State Floral Society was held in the Mechanics Pavilion on May 17, 18, 19, and 20. The grandeur of the exhibition eclipses all former efforts of the society. Mr. John W. Sievers carried off many first prizes, winning first for the largest and best collection of orchids, among them being a grand specimen Cattleya Mendelli. He also won first for foliage plants, ferns, and carnations. The Yokohama Gardeners Association had also a fine display of foliage plants, among them being several dwarfed retinosporas over 200 years old, and about two feet high. The Golden Gate Park had a nice collection of stove plants and orchids. The Sherwood Hall Nursery Co. had a fine display of sweet peas, roses, cannas, etc. They received first prize for the largest and best collection of roses.

One of the features of the show was the magnificient display of sweet peas by Mr. Lynch of the Menlo Park Nurseries. He showed in all thirty-eight varieties, including Eckford's latest, and a new seedling raised by himself called Menlo Park. It is a striped mauve and white, and was one of the most noticeable sweet peas ever exhibited here. He also had a fine display of the Iceland poppy, each individual flower measuring over a foot in diameter. The amateurs were out in full force, with close competition.

Taken all together it was the most creditable show ever given by the society.

A MEMBER.

Foreign Notes.

Mme. Edouard Andre is the name of a new hybrid clematis recently exhibited in France. It is thoroughly hardy, and unique in color, being nearer red than any other large-flowered clematis. The color is described as deep carmine red, shaded with vermilion and infused with violet. It is the result of a cross between C. patens and C. Jackmanni.

A new form of the pandanus is a spineless plant, recently received from New South Wales. This variety, Pandanus Baptisti, is a handsome plant with leaves one to two feet in length, linear and channelled; they are a deep shining green, with from one to four white lines down the center. It should become a popular decorative plant.

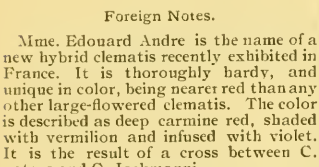
STRING

Your Smilax and other trailing plants with

GREEN SILKALINE.

Same cord can be used with plants when decorating. For samples and prices, address

JOHN C. MEYER & CO.,
289 Devonshire Street, BOSTON, MASS.



OUR

Sash Lifter AND Hinges

will do the work and cost you less than any other. Send your name and address and we will mail you description and price.

BAY STATE HARDWARE CO.
272 Freeport Street, BOSTON, MASS.

COMMENCEMENT

BASKETS.

FOR THE SCHOOL GRADUATE.

There is no present so fitting and appropriate in every way as a handle basket filled with choice flowers.

You can convince your customers of this if you only have a good line of suitable baskets on hand to show. In fact our baskets will sell themselves. If you are wise you will place an order at once. Select from our wholesale list which we mail on application, or leave it to our judgement to select you an assortment. Your order will be filled promptly from fresh stock and at bottom prices.

On Wheat Sheaves, Immortelles, Metal Wreaths and all lines of Florists' Supplies we can please you. Send for our reduced price list.

H. BAYERSDORFER & CO.,
WHOLESALE ONLY. 56 N. 4TH ST., PHILADELPHIA, PA.

Cape Flowers, new crop in best white quality at $1.00 the lb.; 10 lb. lots, $9 net.

Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 28-in. upwards, at 40c., 45c., 50c., 60c., 75c. and $1.00 each, according to length.

Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.

Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.

Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc. For prices consult our

Trade Catalogue, mailed free.

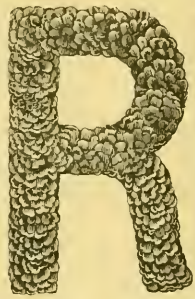
August Rolker & Sons,
136 & 138 W. 24th St., P. O. Station E. New York.

MARSCHUETZ & CO.,
Florists' Supplies,
23 & 25 N. 4th St., PHILADELPHIA, PA.
Send for Catalogue.

ERNST KAUFMANN & CO.,
Florists' Supplies,
113 NORTH 4TH STREET,
PHILADELPHIA, PA.

WHITE DOVES
FOR FLORISTS.
Largest and finest stock in the United States. Write for prices to
S. J. RUSSELL,
850 Montgomery St., Jersey City, N. J.

FLORAL DESIGNS
The Cut Flower Worker's friend. Fine book of 160 pages. Send $3.50 for it, to
J. HORACE McFARLAND, Harrisburg, Pa.

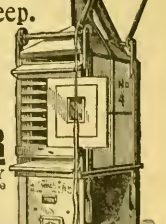


W. C. KRICK'S
PATENT
Florists' Letters, Etc.
Highest Award wherever exhibited.
These Letters are made of the best immortelles, wired on wood or metal frames having holes drilled in them to insert toothpicks, by which to fasten them in the design. All infringements prosecuted.
2-inch Letters, $3 00 per 100.
Postage, 15c. per 100.
Before purchasing send for free sample and Catalogue and compare with any other letter in the market.

W. C. KRICK, 1287 Broadway, BROOKLYN, N. Y.
Agents:—J. C. VAUGHAN, Chicago, Ill.; H. BAYERSDORFER & Co., Phila., Pa.; N. STEFFENS, N. Y.; AUG. ROLKER & SONS, N. Y.; ED. S. SCHMID, Washington, D. C.; JAMES VICK'S SONS, Rochester N. Y.; T. W. WOOD & SONS, Richmond, Va.; J. A. SIMMERS, Toronto, Ont.

BOSTON FLORIST LETTER CO.,
13 Green Street, BOSTON, MASS.
Address all correspondence to 1 Music Hall Place.
Manufacture THE BEST LETTERS IN THE MARKET.
Sizes 1½-inch and 2-inch, $2 00 per 100. Patent fastener with each letter.
With orders for 500 letters we give away a nicely stained and varnished box. See cut in next week's American Florist.
Our letter is handled by all the wholesalers in Boston.
AGENTS: Marschuetz & Co., 25 N. 4th St., Philadelphia, Pa.; A. Rolker & Sons, New York; F. E. McAllister 22 Dey St., N. Y.; Ernst Kaufmann & Co., 113 North Fourth Street, Philadelphia; H. Bayersdorfer & Co., Philadelphia, Pa.; A. D. Perry & Co., 53 Warren Street, Syracuse, N. Y.; A. C. Kendal, 115 Ontario St., Cleveland, O.; E. H. Hunt, 76 Lake St., Chicago; Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.; H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O.; T. W. Wood & Sons, 6th and Marshall Sts., Richmond, Va.; Jas. Vick's Sons, Rochester, N. Y.; Dan'l B. Long, Buffalo, N. Y.; C. A. Kuehn, St. Louis.
J. A. Simmers, Toronto, Ont., Agt. for Canada.

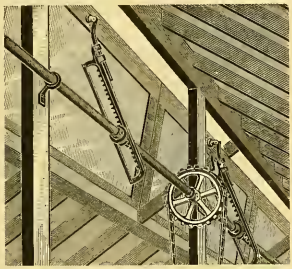
MAKE MONEY
While You Sleep.



STAHL'S
EXCELSIOR
FRUIT DRIER
Evaporates Fruit DAY and NIGHT. Catalogue free upon application.
Address
WILLIAM STAHL
EVAPORATOR COMP'Y,
QUINCY, ILL.

SEE HERE BROTHER FLORIST!

Arn't you tired going through your houses two or three times a day year after year and lifting your ventilating sash one at a time and propping them up with sticks or pots, with a chance of having sash blown off and broken glass to pay for? If you are



We have got just the thing you need, the Newest and Best thing out. "The New Departure" for about half the cost of the old style. Send for Descriptive Catalogue to

J. D. CARMODY, Evansville, Ind.

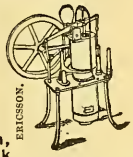
WATER

For Your GREEN HOUSE, ROSE HOUSE, NURSERY,

Conservatory, Lawn, House, Garden, Stock or any other purpose.

Send for Illustrated Catalogue OF THE

DE LAMATER-RIDER AND DE LAMATER-ERICSSON PUMPING ENGINE.



HOT-AIR PUMPING ENGINE.

Their operation is so simple and safe that a child can run them. They will pump water from shallow streams or any kind of well. They can be arranged for any kind of fuel. Capacity 1,500 to 30,000 gallons of water a day, according to size.

The De Lamater Iron Works,
87 South Fifth Avenue,
NEW YORK, N. Y.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

Clear Cypress, from bottom gutter up is my specialty.

Lyman Felheim, ERIE, PA.

STANDARD VENTILATING MACHINERY,

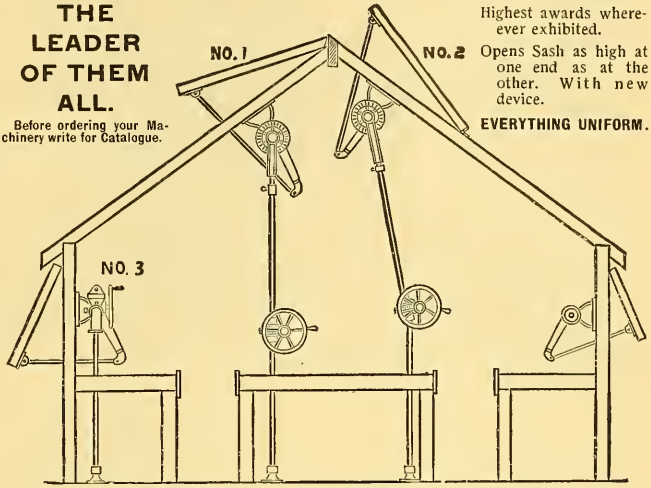
THE LEADER OF THEM ALL.

Before ordering your Machinery write for Catalogue.

Highest awards wherever exhibited.

Opens Sash as high at one end as at the other. With new device.

EVERYTHING UNIFORM.



E. HIPPARD, YOUNGSTOWN, OHIO.

STOTT'S SYSTEM OF SPRAYING SAVES PLANTS-FLOWERS-FRUITS.

KILLMRIGHT KILLS, INSECTS AND MILDEW

STOTT'S DISTRIBUTER CHARGED WITH KILLMRIGHT, CONNECTED WITH FAUCET READY FOR USE WORKS EQUALLY WELL WITH A GARDEN ENGINE.

TOTT'S PRAYER

STOTT'S SYRINGE

CELL "A" CONTAINS THE KILLMRIGHT

SEND FOR CIRCULAR AND TESTIMONIALS.

STOTT GARDEN IMPLEMENT COMPANY
136 LIBERTY ST. NEW YORK.

LITTLE'S ANTIPEST.

— A —

Valuable Discovery of the 19th Century.

SILVER MEDAL AWARDED

— BY THE —

CALIFORNIA STATE FAIR OF 1890.

This preparation Is a sure destroyer of the **Scale, Wooly Aphis** and **Insect Pests** of any and all descriptions. It may be as freely used in the conservatory, garden and greenhouse as in the orchard or vineyard. It is non-poisonous and harmless to vegetation when diluted and used according to directions. It mixes instantly with cold water in any proportion. It is **Safe, Sure** and **Cheap.** No fruit grower or florist should be without it.

Send for Circulars and Price List.

R. W. CARMAN, General Agent,
291 AMITY STREET,
FLUSHING, Queens, Co., N. Y.

Mention American Florist.

CUTS!

Wood Engraving, Zinc Etching, Half-Tone, Wax Engraving, Photo-Engraving, Designing.

MANZ & CO., ENGRAVERS.
183 Monroe Street, CHICAGO.

THE PERFECT DRAINAGE

BENCH TILE

For circulars, etc., address

W. P. Wight, Upland Green Houses,
MADISON, N. J.

Send your business card.

Mention American Florist.

Decisions Regarding Duty on Plants.

Before the U. S. General Appraisers at New York, April 26, 1893.

In the matter of the protest, 42984 *a*—27207, of R. F. Downing & Co., against the decision of the collector of customs at New York as to the rate and amount of duties chargeable on certain roots, iris, German and japonica, Helleborus niger, etc., imported per *Amsterdam*, November 18, 1892.

Opinion by LUNT, *General Appraiser.*

We find—

(1). That Messrs. R. F. Downing & Co., imported into the port of New York, Nov. 18, 1892, certain merchandise which was assessed for duty at 20 per cent. advalorem under paragraph 282, N. T.

(2). That said merchandise consisted of roots of the iris, invoiced as German, Kæmpfer, and japonica, also of Helleborus niger and peonies which we find are commercially known as plants.

(3). That said plants are not chiefly used for forcing under glass for cut flowers and decorative purposes, but are hardy perennials.

The importers claim free entry under paragraph 666, N. T.

Upon our findings the protest is overruled.

Before the U. S. General Appraisers at New York, April 26, 1893.

In the matter of the protest, 43177 *a*—27585, of Peter Henderson & Co., against the decision of the collector of customs at New York as to the rate and amount of duties chargeable on certain Iris fœtidissima folia variegata roots, imported per *Dubbledam*, Nov. 26, 1892.

Opinion by LUNT, *General Appraiser.*

We find—

(1). That Messrs. Peter Henderson & Co. imported into the port of New York certain merchandise which was assessed for duty at 20 per cent. advalorem under paragraph 282, N. T.

(2). That said merchandise consisted of Iris fœtidissima folia variegata roots, and the same were not bulbs or bulbous roots.

The importers claim free entry under paragraph 699, N. T.

It appears from evidence before us that some varieties of the iris are bulbous, such as English and Spanish iris, Iris reticulata and others; but varieties which do not have a true bulb are known in trade and commerce as plants.

We therefore overrule this protest.

THE AMERICAN FLORIST and *Gardening* together to one address for $1.75. Send orders to the American Florist Co.

EVANS' IMPROVED
CHALLENGE VENTILATING APPARATUS
Write for Illustrated Catalogue.
QUAKER CITY MACHINE WORKS, Richmond, Ind.

FLORISTS' HOSE,
Made by E. W. Holt, member of the Society of American Florists.
Goodyear Rubber Store,
2 W. 14TH ST. NEW YORK.

Lawn Vases.
THE LARGEST IN THE MARKET FOR THE MONEY.
17x29-inch .....price $1.00.
17x34-inch, with base, price $1.75.
20x22 inch .....price $1.50.
20x22-inch, with base, price $2.25.
Send for our price list of Standard Flower Pots, Plain and Fancy Vases, etc., etc. Terms cash f. o. b.
HILFINGER BROS. POTTERY, Ft. Edward, N. Y.

Mention American Florist.

THE "LOCKLAND"
Sash Bars * * *
ARE ALWAYS SATISFACTORY.
This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.
GUTTER MATERIAL, RIDGES, SASH, ETC.
The finest CLEAR CYPRESS used.
Write for circulars and estimates. . . .
LOCKLAND LUMBER CO.
. . . . . Lockland, O.

"Standard" Flower Pots.
As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address
The Whilldin Pottery Company,
BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

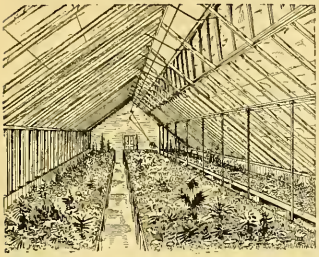
STANDARD FLOWER POTS.
Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.
A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.
We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.
SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY
Manufacturing the
ELVERSON, SHERWOOD & BARKER
STANDARD FLOWER POTS.
Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bud Pots, etc.
ADDRESS PITTSBURGH CLAY MF'G CO., New Brighton, Pa.

H. M. HOOKER COMPANY,
57 and 59 W. Randolph Street, CHICAGO,
NATURAL GAS MADE GLASS
FOR GREENHOUSES.
Write for latest prices.

THE CHAMPION



Automatic Ventilator.

The cheapest, easiest to operate, and by far the best machine in the market. Don't buy a Ventilator until you have seen my illustrated descriptive circular, which will be sent you free, giving prices, etc. Also Champion Soil Pulverizer and Sifter.

Address, E. E. WOLF,
Box 114. SPRINGFIELD, O.

THE WILKS HEATER,

FOR HEATING

GREENHOUSES, STORES, DWELLINGS, ETC.

Manufactured by THE S. WILKS MF'G CO. 123 S. Clinton St., CHICAGO, ILL.

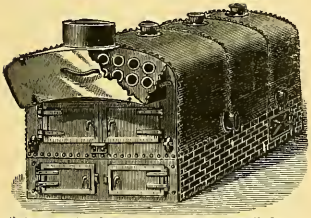
SEND FOR CATALOGUE.

KROESCHELL BROS.

IMPROVED

Greenhouse Boiler,

41 to 55 Erie St., CHICAGO.



Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around front, sides and back). Write for information.

Mention American Florist.

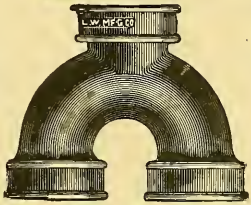
GREENHOUSE HEATING

AND VENTILATING.

Superior Hot Water Boilers.

JOHN A. SCOLLAY,
74 & 76 Myrtle Ave., Brooklyn, N.Y.
Send for Catalogue.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

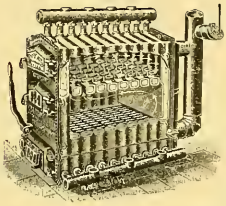
GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

L. WOLFF MFG. CO., 93 to 117 W. Lake Street, CHICAGO.

WRITE FOR ILLUSTRATED CIRCULAR.



Royal Heaters.

—:o:—

HOT-WATER, STEAM.

The Most Perfect Heaters yet designed FOR GREENHOUSES.

Circulation all Vertical.
No Drop Tubes.
All Cast Iron.

HART & GROUSE,
UTICA, N. Y.

FRENCH GLASS For CONSERVATORIES, ROSE HOUSES, Etc. Etc.

VANHORNE, GRIFFEN & CO.,

Importers of PLATE and WINDOW GLASS. Manufacturers of BENT GLASS and FRENCH MIRRORS.

131-133-135-137 FRANKLIN STREET, NEW YORK.

Note—Imported Glass is used in the best grade of Greenhouse building.

STANDARD HOSE MENDER.

The only Mender using ordinary galvanized wire No. 14, instead of expensive bands. Any person can handle it with perfect ease. Thousands in use and all testify to its Wonderful Merits.

Sample Box, by Mail, 50 cts.

E. HIPPARD, Youngstown, Ohio.

GURNEY Hot-Water Heaters FOR Greenhouses.

Send for a copy of our book "How best to heat our houses."

GURNEY HOT-WATER HEATER CO.
163 FRANKLIN ST., BOSTON

New York City: Johnson & Co., 71 John St. Phila.: J. C. F. Trachsel, 246 Arch St. Chicago: Rice & Whitacre, 47 South Canal St.

J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS •

Greenhouse Material,

LOUISVILLE, KY.

IMPROVED GLAZING.

Zinc Joints for putting glass without laps. No leakage. No sliding of glass. Practically air tight. Keeps out cold winds, thereby saving fuel. No laps, saves enough glass to pay for the zincs. No breakage of glass on account of frost or ice. Some of the largest growers in the country are using "Gasser's Patent Zinc Joints" with entire satisfaction. Write for sample and price list.

J. M. GASSER, FLORIST,
101 Euclid Ave., CLEVELAND, O.

Please mention the AMERICAN FLORIST every time you write to an advertiser.

Index to Advertisers.

Abel C C & Co.....1155
Adv. Rates, etc.....1156
American Boiler Co...1168
Anchorage Rose Co. ..1154
Baller F A.....1162
Barnard W W & Co...1159
Bay State Hdw Co...1164
Bayersdorfer H & Co.1164
Boehmer L & Co.....1163
Bonsall Jos E & Son..1162
Boston Letter Co 1164
Brauer & Richter.....1162
Brown R S & Son.....1162
Burns & Raynor.....1157
Burrow J G.....1162
Burton John.....1155
Caldwell Geo W.....1165
Carman R W.....1165
Carmody J D.....1165
Chandlee Geo F 1160
Chitty H E.....1161
Coles W W 1161
Cook John.....1155
Corbrey T J 1156, 1157
Currey G W & Co 1156
De Lamater Iron Wks1165
Dreer H A.....1158
Eldering J W 1158
Elliott W H.....1156
Ellison Wm.....1157
Fairfield C F.....1162
Felheim Lyman.....1165
Field S B.....1160 1163
Forster John S 1160
Forstermann I. 1162
Gasser J M 1167
Gonzalez & Co.....1161
Goodyear Rubber Co .1168
Goodyear Rubber Store 1166
Gurney Heater Co ...1167
Hall Ass'n.....1168
Hancock Geo 1158
Hansen Christ 1161
Hart James.....1157
Hart Michael A 1157
Hart & Crouse.....1167
Hartford H E.....1156
Henshaw Samuel.....1163
Herr Albert M.....1161
Hermann A.....1159
Herrmann G.....1159
Hews A H & Co 1166
Hilfinger Bros.....1166
Hill E G & Co.....1155
Hippard E 1165 1167
Hitchings & Co.....1168
Holmedale Greenhouses 1154
Hooker H M Co.....1166
Horan Edw C. 1157
Hulsebosch Bros 1159
Humfeld S.....1160
Hunt E H.....1157
Hunt M A.....1155 1162
Hunter & Purdy.....1157
Kaufmann Ernst & Co1164
Kelsey Fred W.. 1163
Kemble Floral Co 1161
Kemlooit Bros.....1157
Koffman E.....1156
Krick W C.....1164
Kroeschell Bros . . .1167
Kuehn C A.....1157
La Roche & Stahl....1156
Ley John H.....1162
Lockland Lumber Co..1164
Lombard R T.....1161
Long Dan'l B.....1157
Lonsdale Edwin.....1163
McCarthy N F & Co...1157
McFarland J H.....1164
McFarland J H Co...1156
McGowan John.....1161
Mann R & Son.....1158
Manz J & Co.....1165
Marschuetz & Co.....1164
May John N.....1162
May L L & Co 1154
Meyer John C & Co. .1164
Michel Plant & Bulb Co 1158
Millang Bros.....1157
Moffatt G J.....1159
Moninger Jno C .... .1168
Moon Samuel C.....1163
Moore Frank L.....1155
Nielson Hans 1160
Niles Centre Floral Co1157
Olson M.....1157
Ouwerkerk P.....1161
Peck & Sutherland....1157
Pennock C J.....1161
Poon Samuel S.....1159
Pierson F R Co. 1158
Pittsburg Clay Mfg Co1166
Prince A & S & Co.....1157
Quaker City Mach Co.1161
Randall A L. 1157
Reck John 1161
Reed Glass Co.....1168
Reed & Keller.....1164
Relas & Brady.....1155
Renard Joseph.....1161
Reuter S J.....1158
Rimbaud Benj.....1156
Roberts D H.....1168
Robertson T D.....1160
Roehrs Theo.....1157
Roemer Fred.... ... 1161
Rogers Nurseries.....1160
Rolker A & Sons.....1164
Russell S J.....1164
Sander & Co.....1161
Schneider Fred. .... .1163
Schulz Jacob.....1155
Seollay John A 1167
Scott Robert & Son ..1155
Sebire P & Sons .... .1158
Segers Bros.....1159
Segers & Co.....1158
Shelmire W R.....1161
Sheridan W F.....1157
Siebrecht & Wadley...1161
Simons R E.....1160
Siptle, Doppfel & Co...1166
Situations, wants.....1160
Smith C A Floral Co...1154
Smith Nathan & Son.. .....1161 1163
Smith & Webster.....1168
Spooner Wm H.....1155
Stahl Wm 1164
Stopher Wm 1160
Stott Garden Imp Co..1165
Struck J N & Bro.....1167
Styer J J 1161
Sunderbruch H L1155 1157
Temner Julius & Co...1156
Tricker Wm.....1161
Tottenham Nurseries.1155
Tritschler M.....1161
Vander Schoot R & Son. 1159
Van Horne Griffen & Co 1167
Van Waveren & Kruyff.....1158
Vaughan J C.....1162
Wabash R R.....1163
Waterbury Rubber Co1168
Watson G C 1159
Weeber & Don.....1159
Welch Bros.....1157
Whilldin Pot Co 1166
Wight W P.....1165
Wilks S Mfg Co.....1167
Williams H W & Son..1160
Winter N D 1160
Wisconsin Flower Ex.1156
Wolf E E 1167
Wolff L Mfg Co.....1167
Wood Bros.....1162

DO YOU WANT a list of the leading cemetery superintendents? You will find such a list in our new trade directory and reference book.

CYPRESS GREEN HOUSE MATERIAL

CLEAR CYPRESS SASH BARS

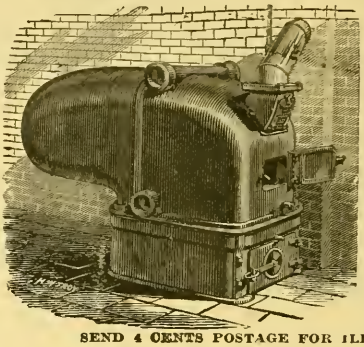
HOT BED AND VENTILATING SASH

JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

GreenHH Mass Agri Col 15 Dec 93

GREENHOUSE HEATING & VENTILATING

Horticultural Architecture and Building.



HITCHINGS & CO.

Established 1844.

233 Mercer St., New York.

FIVE PATTERNS OF BOILERS.
NINTEEN SIZES.

Perfect Sash Raising Apparatus.

Rosehouses, Greenhouses, Etc, of Iron Frame Construction, Erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frome Benches with the "Perfect Drainage Bench Tile" or Slate Top.

SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUE.

STEAM · AND · HOT · WATER · HEATERS

FOR

GREENHOUSE HEATING.

156

DIFFERENT SIZES.

American Boiler Company.

BOSTON, 195 Ft. Hill Square. NEW YORK, 94 Center St. CHICAGO, 34-36 Dearborn St. DENVER, Mining Exchange Bldg. SAN FRANCISCO, 80 Crocker Bldg.

SMITH & WEBSTER,

MAKERS OF

GREENHOUSE PIPE

FOR HOT WATER AND STEAM,

193 Lake Street, - CHICAGO. ILL.

D. H. ROBERTS,

159 & 161 S. Fifth Ave., NEW YORK,

NATURAL GAS MADE GLASS

for ROSE HOUSES, CONSERVATORIES, Etc., Etc.

Our Glass received the Highest Award at the Boston Convention of the S. A. F

GOODYEAR RUBBER CO.

ALL KINDS RUBBER GOODS.

We make a SPECIALTY in GARDEN HOSE, in both Rubber and Cotton.

A GREAT VARIETY OF HOSE REELS, SPRAY PIPES, SPRINKLERS, ETC.

141 Lake Street, CHICAGO.

Pat. 1882, '85, '86, '88, '90, '91.

FOR WATER, AIR, STEAM, ACIDS, OILS, LIQUORS, GAS, SUCTION,

And for any and every purpose for which a hose can be applied.

Sizes, ¼-inch to 42 inches diameter.

The making, vending or use of any Serviceable Armored Wire Bound Hose not of our manufacture is an infringement on one or more of our Patents. The rights secured to us render each individual dealer or user responsible for such unlawful use with all the consequences thereof. For prices and discounts address WATERBURY RUBBER CO., Sole M'f'rs and Owners of all the *Sphincter Grip Armored Hose Patents*, 49 Warren Street, New York.

J. C. VAUGHAN, Agent, CHICAGO.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.

JOHN G. ESLER, Sec'y F. H. A., Saddle River, N. J.

GLASS. ROCK BOTTOM PRICES. Send for Estimate. Satisfaction Guaranteed.

REED GLASS CO.,
65 Warren St., and 46, 48 & 50 College Place,
New York City.

THE AMERICAN FLORIST

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, JUNE 15, 1893.** **No. 263**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company. Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.
322 Dearborn Street, Chicago.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,
P. O. Drawer 164, CHICAGO.

Eastern Office: 67 Bromfield St., Boston.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis. Mo., August 9 to 12, 1893.

CONTENTS.

Short span to the south 1169
Exhibition receipts 1170
The World's Fair 1170
The Horticultural Building at date (illus) . . . 1171
Miscellaneous seasonable hints 1171
The most economical fuel 1172
Carnations—Seasonable hints 1172
Swainsona galegifolia alba (illus) 1172
Philadelphia 1173
Washington 1174
Buffalo 1174
Boston 1174
Manufactures Building, World's Fair (illus) . 1175
Baltimore 1175
Chicago 1176
New York 1176
Toronto 1176
Obituary—James Littlejohn 1176
Canal by Manufactures Building (illus) 1177
Testout and Victoria 1177
Our convention number 1180
The seed trade 1182
The Nurserymen's Convention 1184
St. Louis 1186
Indianapolis 1188
The professor's black calla 1190

IN THIS ISSUE we print an article on the short span to the south system of building greenhouses, which, while not lengthy, gives the results of several months' investigation of the subject by Mr. James D. Raynolds. The question is one that had not yet been fully treated by any accessible authority and a great deal of original investigation was necessary. The figures show that there is but a very slight advantage in the short span system. But those who have built houses of this style still claim the advantage to be very great, and numerous growers who have watched these houses during the past season are preparing to build this summer on the short-span plan.

THE Vereins Deutscher Rosenfreunde will hold a rose show at Lubeck, July 7 to 10. There are 178 classes for competition. The classes are mainly for outdoor-grown blooms.

Short Span to the South.

EDITOR AMERICAN FLORIST:—As requested, I have made some study of the "short span to the south" problem to determine in the light of pure mathematics what is the proper pitch for a greenhouse roof, to secure the maximum effect of the sun's rays during the winter months.

It is assumed that if a roof pitch can be determined that will be most effective between the fall equinox, September 20, and the spring equinox, March 20, the purpose will be served, since experience has shown that during the other six months there is ample sunlight, no matter what the roof pitch. Hence this investigation is confined to the period between September 20 and March 20.

There is probably no reader of the FLORIST who does not know from personal observation that the nearer the direction of the sun's rays coincides with a line perpendicular to the glass the greater is the proportion of light and heat passing through the glass.

The angle which a ray of light makes with the perpendicular is called the "angle of incidence." It is a well established principle of optics that the amount of light passing through a plane glass surface varies in an inverse ratio with the angle of incidence.

If the angle is zero something over 95 per cent passes (the rest being lost through dispersion and direct reflection). If the angle is 90 degrees (that is when the direction of a ray is parallel with surface of glass) no light passes, and between these limits the percentage of light passing varies according to the following formula (for which I am indebted to Professor S. W. Stratton of the University of Chicago), being an adaptation of what is known as "Fresnel's formula":

$$P = 1 - \left\{ \frac{\sin^2 \left(I - \sin^{-1} \frac{\sin I}{1.6}\right)}{\sin^2 \left(I + \sin^{-1} \frac{\sin I}{1.6}\right)} \right\} \qquad (1)$$

In which,

1 is total light impinging upon glass.

P is percentage of light passing through glass.

I is angle of incidence of sun's rays.

1.6 is "index of refraction" for ordinary glass.

In using this formula further on it will be assumed that the direct rays of the sun are of equal intensity at all hours of the day; this is not strictly true, since during the morning and evening hours there is a certain loss, owing to absorption, dispersion and refraction of light in passing through an atmosphere of greater than average density. The amount of this loss, however, is found to vary so slightly with different roof pitches as to be insignificant, and it may safely be disregarded in estimating final results.

For the solution of the problem before us, it is not sufficient to consider the angle of incidence of the sun's rays at noon for any given roof pitch, or any given date (as for instance the winter solstice, December 20-21). Yet this has apparently been the method hitherto pursued. To be strictly accurate, we should determine the percentage of light passing during each hour of each day of the six months from September 20 to March 20, for each particular roof pitch and for the latitude of each particular place. It is essential that the value of P should be computed for each hour of any given day, so that the total percentage of light passing between sunrise and sunset may be averaged up, but it is sufficient for present purposes to take a few representative days, as, say September 20, November 5 ("Guy Fawkes day," which is nearly half way between the fall equinox and the winter solstice), December 20, the winter solstice, February 2 ("Ground-hog day," which is nearly half way between the winter solstice and the spring equinox) and March 20, the spring equinox.

Moreover, considering the shortness of life, I shall not attempt to solve this problem for more than one latitude, viz., the parallel of 40° N., which is not far from the latitude of Denver, Springfield, Indianapolis, Columbus, Pittsburg and Philadelphia.

For latitudes a few degrees north or south of this parallel the results will be found to differ so slightly that the difference need not be considered.

For a strictly accurate solution of equation (1) it would be necessary to formulate a somewhat intricate differential equation, which, being integrated between the limiting values of I between sunrise and sunset, would give the percentage of light passing through glass for any given day.

Then a new differential equation should be formulated, which, being integrated between the limiting dates, would give the total percentage of light passing for any given roof pitch.

In practice, however, the "graphic method" will be quite sufficiently accurate and will be adopted in this discussion.

To find the value of I in equation (1) (I being the angle of incidence at a given hour of a given day), we find the following formula:

$$I = \cos^{-1}\left[\sin M \cos(C - N)\right] \qquad (2)$$

$$\text{where } M = \cos^{-1}(\sin H \sin z)$$

$$\text{and} \qquad N = \sin^{-1}\left(\frac{\cos z}{\cos H}\right)$$

In this equation z is the zenith distance of the sun for the given day and hour, and H is the hour angle before or after noon (reckoning 15 degrees to the hour).

To find the value of z in equation (2) the following formula may be used:

tisers.

$$z = \varphi \pm \varphi' \quad (3)$$

in which $\varphi = \tan^{-1}(\tan Z \cos y)$

$$\varphi' = \cos^{-1}\left(\frac{\cos\varphi \cos h}{\cos Z}\right)$$

$$y = \tan^{-1}\left(\frac{\cos L \sin H}{\sin L \cos Q + \cos L \cos H \sin Q}\right)$$

and $h = 2\sin^{-1}(\cos L + \sin \frac{H}{2})$

In this equation Q is the noon zenith distance of the sun for latitude zero on a given date, and Z is the noon zenith distance for latitude L.

To show the application of these formulæ a single example will suffice.

Let L (the latitude) be 40°

Let C (roof pitch) be 26° 30′

Required to find the percentage of light passing through glass on Dec. 21st at 10 o'clock A. M. or 2 o'clock P. M.

Here H is 30°

Q is 23° 30′

and Z is 63° 30′

Substituting these values of Q, H, Z, and L in equations (3) we find the zenith distance of the sun for the given time to be.

Z equals 69° 26′

Substituting values of Q, H and C in equations (2) we find the angle of incidence of sun's rays with glass to be

I equals 28° 02′

And substituting this value of I in equation (1) we find the percentage of light passing through glass at the given time to be

P equals .9285

For convenience of reference let us call the entire sunlight falling upon the glass during one hour a *sun-hour*, then the above value of P shows that during the hour from 9:30 to 10:30 A. M. we have about 93 per cent of one *sun-hour* and the same again during the hour from 1:30 to 2:30 P. M. During the morning and evening hours the percentage changes so rapidly that it will not serve to figure by full hours. It is sufficient however to compute the value of P for sunrise and sunset and for even hours between, and using these values as ordinates a curve can be constructed from which intermediate ordinates can be scaled off with great nicety and so the fraction of a *sun-hour* be found for each quarter hour. Proceeding thus for the 9½ hours between sunrise and sunset and adding up the results we find that

On Dec. 21 in Lat. 40° with roof pitch 26° 30′ we get 8.33 sun-hours, instead of the 9½ which we would have if the rays fell perpendicularly to the glass all the time.

Now if the entire process given above be gone through with again for every 10 degrees of roof pitch from zero to 90° the resulting values form the ordinates of a curve whose maximum ordinate will correspond to that particular roof pitch which will be most efficacious on the 21st of December.

This pitch is found to be about 23°, giving the maximum number of *sun-hours* 8.35.

For a vertical glass surface the roof pitch will be zero and the number of sun-hours 8.28. For a horizontal glass surface the roof pitch will be 90° and the number of sun-hours 5.4. So much for December.

Now let the same processes be gone through with for each 10 degrees of roof pitch for November—February and for September—March and corresponding curves laid out. It is found from the November—February curve that the maximum number of sun-hours is 8.95 which is obtained with a roof pitch of about 30°. From the September-March curve it is found that the maximum number of sun-hours is 9.85

Combinding these three curves we can establish a *mean curve* for the six months under consideration whose maximum ordinate will be found to be about 8.95 sun-hours, corresponding to a roof pitch of 40°.

With a vertical glass surface the number of sun-hours would be 8.4, with a horizontal surface it would be only 6.9.

With a roof pitch of 26°-30′ (short span to the south) the number of *sun-hours* would be 8.92 while with a roof pitch of 58°-30′ (about that recommended by Mr. May for long span to the south) it would be 8.6. It may at first seem a matter for surprise that while we get with a roof pitch of 40°, 8.25 *sun hours* on Dec. 21 we only get 9.7 sun-hours on March 21, when the days are some two and a half hours longer. But it must be remembered that on Dec. 21, so soon as the sun appears above the horizon its rays strike the glass at an angle of incidence of about 71° at which angle 65 per cent of the rays pass through. While on March 21, the rays at sunrise are parallel to the surface of the glass, and no rays pass through. Again it is a fact easily verified by observation that in June the sun must be at a considerable altitude above the horizon, (said altitude varying with the roof pitch) before any rays pass into the greenhouse except through east windows.

With a horizontal glass some portion of the rays would begin to pass immediately after sunrise. With a vertical glass (in an east and west plane) it would be about 7 o'clock, more than two hours after sunrise, before any light passed through.

We all know from hard experience that the difference between the available amount of sunlight in a greenhouse Dec. 21, and March 21, is really considerably more than that indicated by the sun-hour values given above, viz. 8.25 and 9.70, but this difference must be accounted for by largely greater proportion of cloudy weather experienced in December.

To sum up the whole matter, after this somewhat tedious and bewildering array of mathematical formulæ, the result arrived at is simply this:

The difference between the total sun-hours for a pitch of 26°-30′ and a pitch of 58°-30′ is only .28, a little more than quarter of an hour.

A pitch of 40° would give an advantage of almost exactly quarter of an hour to the "short span to the south" advocates, but this difference may prove insignificant in comparison with practical considerations which have no place in a purely mathematical discussion.

The conclusion arrived at from this investigation is that the amount of sunlight passing through an east and west greenhouse roof is greatest at a 40° pitch, but varies so little between the limits of a 20° pitch and a 60° pitch as to be of trifling importance. The matter of real importance is to so adapt the pitch of roof to the distance between parallel houses and to the desired position of benches that no bench shall be unduly shadowed and no house shall cast a detrimental shadow on its neighbor to the north. If opportunity arises I may attempt to enter into this phase of the question, but among your correspondents there are many who are doubtless better qualified than I to carry on the discussion. JAMES DUNCAN RAYNOLDS,

Riverside, Ill., June, 1893.

Exhibition Receipts.

I read with interest the report of Mr. G. C. Watson in last number of FLORIST. His figures are interesting, showing as it does that the general attendance at these exhibitions is not what it ought to be. Advertising on a large scale helps to bring more people from year to year, and your paper states correctly that money spent in advertising one year is an investment, and helps the exhibition another year.

When we started our first exhibition in 1887, we were sadly disappointed in the attendance, we advertised largely, gave flowers away, had big placards at the State Fair, excursion rates on railroads, street car advertising, had all the newspapers on our side, they published glowing descriptions of the beauties of the show, but still the public was passive and only attended in moderate numbers. But from year to year the attendance grows larger and if the receipts are not as large as they ought to be, it lies with the counter attractions and bad weather. Our last show was a case of bad weather. Thursday, the best day generally, was rainy and disagreeable, which made a difference of at least $500 in our receipts. This would have been our surplus. The expenses were extra heavy, which is an indirect but substantial adv. for the next show. It was acknowledged on all sides that we had done our very best and everyone went away delighted.

This is a point which should not be overlooked, every succeeding show should have features that are an improvement over the last. If not, advertising will not help much in our case and the papers will not and cannot write up the shows as they would if it was otherwise.

A great drawback in these exhibitions generally is the petty jealousies among the florists of nearly every city in this country. Some brethren in the trade seem to lose sight of the fact that these exhibitions benefit the whole trade. They *may* help one firm more than another; it depends how their goods are put before the public. How elevating it would be to see all those interested trying to make these annual flower festivals a still greater success than ever before. But, alas, that time seems only a vision. I know of instances where those in the trade have actually talked against their own interests by trying to offset the value of advertising.

The actual door receipts for 1891 were $1,864.25; receipts, auction and booth, $375; 4 days, $2,239.25. Actual advertising expenses, $300, of which $150 went to the newspapers and $150 for posters, cards, etc. Besides a programme souvenir of 20,000 copies which nearly paid for itself by advertisements.

We do a great deal of advertising over the State and consequently are increasing our attendance from the country towns. We are liberal with free passes to the press and also do not spare in treating reporters with flowers. W. G. B.

The World's Fair.

One of the most interesting features in the Horticultural Building is the miniature Japanese garden. This is composed almost entirely of dwarfed plants arranged in typical Japanese style. Near the center is a pool of water crossed by a rustic bridge, and a winding path leads through the garden from one end to the other. Among the plants used there are 40 varieties of Japanese maples, showing a wonderful variety in form and color of the foliage, and the gem of the collection

THE HORTICULTURAL BUILDING AT DATE.

is a plant in a 16-inch pot upon which 24 varieties have been grafted. Then there are 200 varieties of irises, 140 varieties of pæonias, 20 varieties of azaleas, 8 varieties of bamboo and 7 sorts of dwarfed evergreens. Among the dwarfed evergreens is a thuja that is supposed to be at least 100 years old. A strange form is a pine in a pot which has been grown so that the roots have been made to do service as a stem, while the tree has been kept in the form of a mat at the junction with the roots. The mat of minute foliage carried aloft by the rough roots as stems make a curious object. Hanging from the bridge and other places are what seem to be roots twisted into wreaths and other curious forms, covered with handsome fern foliage. These proved to be aspleniums trained to grow on frames of water moss. One hanging near a rustic stone wheel was in the form of the hook used to fish out a lost bucket from a well. In the pool of water float a number of mossy blocks upon which are growing freely Lomaria Japonica. The blocks, Mr. Izawa explained, were sections of the trunks of tree ferns to which the lomaria readily attaches itself, and which float readily. Among the bamboos was a very pretty variegated form of exceedingly dwarf growth,—so dwarf that at first glance it would be taken for a variegated grass. A striking feature is what might be called a microscopic garden in a miniature garden. It is a wooden float about 3 by 4 feet upon which are arranged the smallest plants in a garden similar in plan to the larger one. It is really too small even for a doll's garden and attracts great attention from visitors, most of the ladies pronouncing it "just too cute for anything." This exhibit is by the Japanese Government and is in charge of Mr. H. Izawa, who is not only an excellent gardener but a very pleasant, intelligent gentleman, who has mastered the English language and is able to introduce all comers to his pets.

The Horticultural Building at Date.

The accompanying view shows the appearance of the Horticultural Building at date. Along the front of the North wing one of the long pansy beds may be dimly seen. At the entrance is a pair of pyramidal bay trees. The plat of lawn in the foreground will contain one of the huge canna beds soon to be planted.

Miscellaneous Seasonable Hints.

The florist who grows and sells a general stock has been (if he is a thinking man) awfully worried about his future stock; because to some extent the stock of roses, chrysanthemums, etc., has been neglected, and how to get around to giving proper attention to all is a perplexity.

Roses and carnations are so well exploited that I will tell you about a few useful plants that enter into the life of every general florist.

Chrysanthemums have been grown in the old orthodox style for many years, and with poor results. The private gardener can afford to waste his time on specimens; but what the general cultivator needs is a good plant that he can sell for from 75 cents to $1.50. To do this never plant them out of doors. If you do their roots will be spread all over creation. Still, to grow them in pots requires a good deal of work, constant watchfulness being needed. Therefore, take good, young cuttings struck in May or early June and plant them out on a bench in four to five inches of soil. In this case it matters little whether the soil be old or new, so long as it is in the right mechanical condition. Stop the plants once or twice, as common sense will dictate, and on the first of September dig them up and pot into 5, 6 or 7-inch pots. The writer has tried this and it is a great success.

The great advantage in growing them on a bench in a house is that you can always give them the desired amount of notice; but what is of far more importance you can put your fork under the plant and lift it up on September 3rd without losing a fibre. You may think you are a little late but you are not. If you plant before the first of July you are all right.

Another plant which the general florist has great demand for of late years is the calla. Bulbs are offered for sale by different houses. Did you notice when you potted up your dormant bulbs in the fall that there was a number of small bulblets attached to the old bulb. Even if they were only the size of a good large pea, they were plenty large enough to make fine plants for next winter. They should have been grown along in 2-inch pots till January and then put into 4-inch. If you are crowded for room let them take a seat under the bench near the edge and they will do no harm. But now you have time to look after crops for next year, take those young callas and put them into 5-inch pots, stand them on a dry bottom, because a deluge of water is needed. Keep them well supplied with water all summer and in the fall you will

be rewarded with a lot of magnificent, sturdy plants that will give you from four to five flowers to each plant.

Don't neglect shifting your gloxinias and stand them on an inverted 6-inch pot. The circulation of air seems to do them good.

Myosotis palustris and its varieties is a very useful plant to the florist who does a retail business. Take off a few cuttings now and keep them all summer in pots; in fact starve them, and when you plant the carnations in the fall, put a few of these round the edge. They won't hurt the carnations and they will be far more profitable than tomatoes.

Buffalo, June 13. WM. SCOTT.

The Most Economical Fuel for Heating Greenhouses.

BY JOSEPH HEACOCK.

[*Read before the Philadelphia Florists' Club, June 6.*]

I can scarcely imagine a more unseasonable subject than the one assigned to me. With the thermometer in the nineties, one has very little use for fuel, but begins to think of some refrigerating process to reduce the temperature of our houses, and I do not doubt but what, with our present knowledge, if applied, we could keep it from going above 75° or 80°, and that as good Mermets and Brides could be grown through the hot months as at any season of the year, and that we would find ourselves going into our greenhouses to cool off, the same as we now hunt the agreeable shade of a tree.

But if the glass does indicate 90° in the shade June 6, we cannot forget that we have been firing up to the first of the present month, and that a long, hard winter has just closed, and that in a few weeks that will pass before we know it, we will be at it again. For in this changeable latitude, the successful rose grower must fire during nine months of the year.

As to the most economical fuel for heating greenhouses, my experience has been confined entirely to anthracite coal, and until the last five years I always used the size known as stove. But when in the fall of 1888, my foreman, Mr. Adolph Fahrenwald, commenced working for me, he advised the use of pea coal on account of its low price. We tried it and found it very satisfactory, and, later began using a still lower priced coal, smaller in size, known as buckwheat. This we have used almost all the time since, the only exception being when we would get out of it and were forced to buy at the local yards, and take what we could get.

It is sold cheaper than the larger sizes, (they being used mostly for domestic purposes) and is a waste product at the coal mines. The railroad companies, being more or less interested in the mining of coal, give a lower freight rate on it. There is just as much heat in a ton of buckwheat coal as in a ton of the larger sizes. It takes more draft to burn it, and needs to be fired oftener and in smaller quantities, but otherwise, can be burned as readily.

I have prepared a table showing the amount of coal I have burned during each of the past five seasons and its cost, also the amount of glass heated and the amount of coal and cost of same per 1,000 square feet of glass.

The season of 1888-89, we used chestnut, stove, pea and buckwheat; in 1889-90, we used pea and buckwheat. Each of these years it was bought at coal yards in the neighborhood at retail price. Since this time I have bought by the car load, delivered at nearest siding.

The increase in cost the past season over the previous one is caused by the fact that I also heated by indirect radiation, a school-house, containing over 50.000 cubic feet, said school-house being 400 feet from boilers and the steam passing to it through pipes underground.

The prices of the different sizes of coal during the past winter has been: Egg, $4.60, chestnut $4.50, pea $2.75 and buckwheat $1.90 per ton, which shows how much cheaper the buckwheat coal is than the others, and makes one glad that he is not burning them; for in these times of close competition, it is difficult enough to pay for the cheaper article.

Seasonable Hints.

Now is the time to look after the houses, make necessary repairs and build new ones if they are needed. A word of caution may not be out of place. It is a great mistake to think one must build an addition to his plant every year. There is such a thing as having too much glass. The wise grower will curb this disposition so prevalent among florists, and limit his glass area to what he can pay for and manage properly. A great many young men are rushing into all branches of the trade, and particularly the growing of carnations. They should know that there is nothing more than a fair amount of profit in it, and not that unless by industrious and constant application. He who starts to grow carnations with the expectation of getting suddenly rich or avoiding work will be sadly disappointed. Our advice to the novice is to learn the business thoroughly at some good place before starting on his own account. The probability is his ardor will be considerably dampened in a very short time, and he will find that that the growing of flowers is very prosaic work. We would not, however, discourage anyone who really has the ability, grit and a liking for the business.

In building we would follow those designs that have stood the test of experience. We have seen carnations growing in all sorts of houses, but those with two-thirds span to the south seem to suit them the best and make the most convenient and economical buildings. We know nothing of the short span to the south houses, but can wait for future developments. There are a few points to be observed in erecting new greenhouses. Build of the best material—iron perhaps if you wish permanency, but a very good house can be built of wood and for much less money. The first greenhouse built by the late Chas. T. Starr was of wood and stood twenty-one years. The best materials should be used. Avoid sap wood in sash bars, gutter plates, purlins, ridge-pole, etc. Yellow pine heart wood 3x12 makes excellent and lasting gutter plates if well painted. These should not be covered with tin, but coated on the gutter side with coal tar. The coal tar should be renewed at least every other year. Iron pipe makes the best purlins, and for supports nothing else should be used. Old boiler tubes or second hand pipe can often be obtained at quite a low price for these purposes. Old pipe too makes the best support for the side benches at least. Cut the pipe about the width of the bench and drive into the post into a hole made for it. The other end is supported on a leg. Two 2x4 hemlock scantlings are stretched across the pipes lengthwise of house, and the bench boards nailed to these. Always be sure to leave enough space back of bench to allow the drip to fall clear and not on the bench, which would then be continually too wet. Use locust or cedar posts when they can be had. Next in durability is chestnut and good white oak. Bricks for flues or chimneys should always be well burnt—a soft brick soon crumbles to pieces in the dampness. Paint all wood work well before putting together. W. R. SHELMIRE.

Avondale, Pa.

SEASON.	TONS BURNED.	COSTING.	AM'T OF GLASS.	AM'T BURNED per 1000 sq. ft.	COSTING per 1000 sq ft.
1888-89	66 { Stove, Chestnut, Pea, Buckwheat }	$ 240.46	6,600 sq. ft.	10 Tons	$36.40
1889-90	125 Buckwheat	319.39	14.000 sq. ft.	9 Tons.	22.95
1890-91	205 Buckwheat	393.22	22,000 sq. ft.	9⅓ Tons.	17.80
1891-92	324 Buckwheat	600.58	34,000 sq. ft.	9½ Tons.	17.57
1892-93	547 Buckwheat	1,102.50	50,000 sq. ft.	11 Tons.	22.11

Swainsona Galegifolia Alba.

The engraving shows a vase of cut sprays of this charming white flowering greenhouse plant. These were grown by Edwin Lonsdale, Chestnut Hill, Philadelphia, who thinks highly of this as a good subject for furnishing cut flowers nearly the whole year. As it makes growth it produces flowers. With liberal treatment it grows freely, consequently it is a free bloomer. The plants from which the sprays were cut were planted from 6-inch pot last October, in a bed of carnations near to the upright supports of the greenhouse structure (an inch and a half iron pipe) at intervals of a few feet apart, and these plants are now from 5 to 6 feet tall, bushy plants covered with its pure white pea shaped sprays of blossoms. Judging from these specimens, the temperature of a carnation house—50° to 55° at night—and the soil in which the plants are growing, seems to suit them admirably.

Seeds of it are offered in some catalogues, but as there is a doubt about its coming quite true from seed, being a sport from the colored type—galegifolia—and as it roots readily from cuttings, it is hardly worth while to risk growing it from seed.

The swainsona belongs to the Leguminosæ as will be surmised from the shape of the flowers in the engraving. It is a native of Australia and the species are quite numerous and of various colors. Of the galegifolia there is a pink and also a red variety in addition to the white, but the latter is the most useful to the florist. Although not new it is rarely seen nowadays, and we predict for it a place in most greenhouse establishments, when it is better known, especially will it be a boon for the florist who does a retail trade, as a spray or two in a bunch of loose flowers will add a grace and beauty which hardly anything else can do.

As indicated above it should have liberal treatment—plenty of root room, either planted out in a solid, well drained

SWAINSONA GALEGIFOLIA ALBA.

bed, or a large pot or box. Abundance of water at the roots when it is growing freely is about all the attention it requires. Insects have so far not bothered it, so that taking it all in all, the surprise is that it has not found its way into general cultivation years ago.

W.

Philadelphia.

The library room at the June meeting of the Florists' Club presented a very weird and uncanny appearance. The books had all been removed from the shelves in the cases to a place of safety in case of a heavy rain storm, the carpet, ruined by water and cinders, had been taken up, and most of the chairs bore evidence of the late disaster. In addition to the general discomfort there was no gas, and light was furnished by a few oil lamps on the president's desk, as there was no other place to put them. Even they gave out before the meeting was over and lanterns were brought in and hung from the chandeliers to enable the members to continue their deliberations. However, it was home and despite the unpleasant surroundings it was a well attended and very interesting meeting; in fact we do not remember an occasion in which all the members present took so much interest in the proceedings as at this meeting.

In the absence of Robt. Craig, in Chicago, Robt. Kift was elected president pro tem, and George C. Watson acted as secretary in place of H. Michell, who was unable to be present. S. J. Bunting, of Phila., and Charles Simons, Lansdowne, were elected to membership. Mr. Farson was asked what he thought the trustees of the hall had in mind and said that the insurance had not yet been adjusted, but that as soon as this was straightened out he thought it was the intention to rebuild at once, so as to be ready for the chrysanthemum show in the fall.

A very excellent paper on "The best fuel for heating greenhouses" was then read by Mr. Heacock, for which he received the thanks of the club and the paper was given to the committee on publication. [It appears in full elsewhere in this issue.—ED.] There was a general discussion of the paper and all seemed to agree that small sized coal, when used with proper appliances made the most economical fuel. Just as a motion to adjourn was about to be put a resolution was placed before the meeting, upon which some half dozen of the boys wanted to speak at once, and it was at least an hour later before the eloquence ran out.

Business is very poor, transient trade having fallen off to a very great extent. Funeral work and a few school commencements put in a little life, but the season may be said to be over. Prices are down to the summer level, roses, Beauties $20, Brides and La France $4, Mermets about done, Watteville and Cusin $3, Perle, Niphetos, Guillot $2, carnations 75 cents to $1, sweet peas 50 cents to $1, valley $4 to $5, smilax $20, pæonies 50 cents a dozen.

As an evidence of the hard lot of a flo

rist, who has no regular office hours and has to stay late at the store, often until the wee small figures of the clock indicate the time of his returning home, we have this little item to record of "Matt" Bell, a very useful member of the craft. The Reading R. R. Co. recently moved their depot from 9th and Green to 12th and Market streets, and "Matt" was detained to such an extent that he got to the window just in time to get the last ticket that was sold from the old station and had to run to make his train, which left at 12:45 a. m. Such devotion to business should bring its reward. K.

Washington.

Unusual preparations were made for a proper observance of Decoration Day this year, and the ceremonies were more than ordinarily artractive, universal and well attended. The weather was delightful. It was clear and cool, and the sun shone forth from light clouds that softened its glare and tempered its heat.

Memorial day of '93 in this city differed most from previous years in the unprecedented lavishness with which flowers were used. At all the cemeteries, the monuments to the soldier dead were strewn with handsome designs in flowers and greens, and with simple tributes of cut roses, lilies and other flowers.

The principal and most imposing ceremonies of the day were at Arlington National Cemetery, where 16,700 sleep in serried ranks, with Sheridan, Crook, Porter and other famous fighters. Arlington never looked better than it did last Tuesday. Everything was in most perfect order. The grass looked velvet-like, not a leaf nor twig from the beautiful trees could be seen, and the walks and drives were perfect. Gen. Sheridan's tomb was handsomely decorated with baskets and bunches of roses and lilies. A G. A. R. badge about 3½ feet high resting on an easel composed of immortelles and chenille was a very fine piece of work. A guidon made of white and red immortelles with staff of chenille was a handsome piece. On the base of the monument rested four beautiful baskets of cut flowers. There was also a representation of the General's saddle made of red and white carnations and roses edged with smilax and asparagus. The stirrups and straps were of chenille. The monument was draped with a large flag.

There is nothing in the way of a monument to mark the resting place of Adm. Porter except that the lot is fenced in by a very handsome bronze chain which passes through white marble posts about 2½ feet high. Within this inclosure at the foot of the grave was a blue immortelle anchor, resting on a capstan-post of white cape flowers, it was excellently executed and was about four feet high. There was also the ship which was there last year, representing an old-fashioned frigate about 8 feet long. The rigging was festooned with Asparagus plumosus.

The monument just erected to Gen. Crook, the famous Indian fighter, is a very massive affair, being a square block of dark granite, weighing 35 tons. This monument was draped with the stars and stripes. Bunches of calla lilies and roses tied with ribbon rested against the base of the block and other flowers were strewn about the lot.

The tomb of the unknown, where rests the remains of eleven hundred and more, was given special attention. On the front of the massive tomb was a large scroll of white roses and white carnations, with the following inscription in red carnations. "We lie here in obedience to our country's command." The tomb was draped with a large flag. The base was wrapped in cloth studded with lilies, roses, carnations and daisies. The entire structure was completely covered with flowers, as was the ground for several feet around.

Considerable improvements have been made this spring under the supervision of Mr. Rhodes, the landscape gardener. A granolithic walk has been laid from the west entrance to the mansion, a distance of about 2,000 feet. It is nearly five feet wide, thus making it possible for pedestrians to reach the mansion comfortably in winter or bad weather as well as in summer, this was a much needed improvement. One hundred and fifty acres have lately been taken in to the cemetery and is rapidly being improved. Mr. Rhodes has a force of about forty men reconstructing Fort McPherson, which stood on this piece of property. Driveways are being made through this property and from a point east of the fort is one of the finest views overlooking Washington, Alexandria and the surrounding country both in Maryland and Virginia. Owing to the limited appropriation for this purpose Mr. Rhodes will very soon have to withdraw his force from these improvements, and wait until next season before resuming work. There was no special appropriation for this improvement and the work could not have been done but for the economical way in which Mr. Rhodes has conducted the labor in the old part of the cemetery. He economizes at every point and yet keeps the place in most perfect order.

The rhododendrons at Arlington were perfect this season; the bed, containing some 200 or more plants, was one mass of flowers. The loss of evergreens during the past winter was slight. Mr. Rhodes says that those lost were not from the severe winter, but thinks the cause was last summer's drouth, aud in support of this theory he pointed out the healthy condition of the evergreens grown in the low damp portion of the grounds, saying "not a single plant was lost in this section," while quite a few had died in the higher and dryer sections, particularly the broad leaved evergreens, which seemed to be sun scorched. The ivy on the out-buildings suffered severely from the same cause. The rockeries on either side of the drive near the mansion are looking remarkably well this spring. They are planted entirely with tropical plants in a majority of cases. The pots are sunken into the pockets and the entire surface covered with moss gathered from the woods, which is kept green all summer. The plants thus used include pandanus, palms, rubbers, ferns, marantas, agaves, araucarias and begonias.

Speaking of decorations, the galax leaf has come to stay. During the past season C. Strauss & Co. have used it in many novel ways. Their recent decoration of the 105th General Assembly of the Presbyterian Church was largely of this beautiful bronze red leaf. They supplied two very large decorations for Gen. Logan's tomb on Decoration Day at the Soldiers' Home, one a wreath five feet in diameter with a cluster of wheat at one side tied with red, white and blue ribbon; the other a scroll six feet tall. Both pieces were made of galax leaves. The scroll was bordered with a broad band of lily of the valley, and across the face of the scroll appeared lettering in the new pyrethrum flowers, while the scroll was surmounted by a large sabre of white carnations with streamers of red, white and blue ribbon on the handle.

A very attractive and altogether original use of lycopodium caught my eye on entering their parlors under Masonic Temple. They have a bank of lycopodium around three sides of the room sloping from the floor to the edge of the plate glass mirrors, which form the sides of the store. The effect is beautiful, especially in the evening, when thirty incandescent lamps in the lofty ceiling are turned on, the mirrors throwing the light down on the foliage plants and flowers below.

At a special meeting of the Florists' Club held Monday evening, June 5, at the store of Gude Bros., the proposition made by the Chicago Florist Club regarding a contest in floral arrangement at the World's Fair was taken up and thoroughly discussed. It was decided to shortly appoint a committee from among those going to St. Louis and Chicago to co-operate with similar committees from other clubs. This committe will probably be appointed at our next regular meeting. An appropriation was made for the purpose of purchasing a silver cup to be donated as a prize in one of the classes.

The club decided to send a floral offering to the family of the late Edwin Miller (and a very large gates-ajar measuring 5 feet was selected), whose untimely death, the coroner's jury says, was brought about by his own hand.

C. LESLIE REYNOLDS.

Buffalo.

It has been a very busy time with all hands for the past three weeks, and the end is not yet. There has been no cause for grumbling among the plant men this year, and it looks at present as if everything will be entirely cleaned up. There was with good reason a great grumbling about the weather in May, but June so far has been so beautiful that we forgive poor May. It has been warm and humid and most conducive to growth for plants outside. There has not been a very heavy crop of June weddings but they are coming fast. The cold spring months accounts for that. The trade in the stores has been quite as good as in former years, and a little better.

A very hurried visit to the different establishment a few days ago revealed the face that each one of them had got *some* stock that was superlative. Begining at C. F. Christenson's beautiful place on Delaware avenue the genial host took time to say that prices were a little better than last year and he expected to sell plants till the fourth of July. "Chris," as he is familiarly known, is hard to beat at growing good market stuff. He will take hold of some common plant that should be sold for 4 or 5 dollars per hundred, such as ageratum, lobelia, etc., and grow them to such perfection that he commands 20 to 25 cents each for them. Chris is looking for the "mighty" and not fame. His specialty this year is the Crozy canna, of which he has a grand lot, and could not spare the writer one.

Mr. James Milley's place on Masten St. was as it always is, perfection for neatness and healthy plants. "Billy" is working awful hard and says the store on William street may turn out all right and hopes it will, but at present when "Johnnie" sends home an order to fill a vase for Mrs. Jones, three miles from the greenhouse he wishes the store was in sheol. Billy's specialty this year is Begonia Vernon and pot carnations.

GENERAL VIEW OF THE SOUTH BASIN AND THE MANUFACTURES BUILDING.

Mr. Sebastian Pickleman on High St. was from appearances doing all he could do and nearly sold out except one batch of stuff, and that was a remarkably fine lot (several thousand) of tuberous rooted begonias.

Mr. Keitsch on Handel avenue says he never had so good a trade, and has found little need of the market this year. Mr. K. has a large lot of the hardy pyrethrum and what a beautiful thing it is at this time of year! They should be in every garden. Mr. Keitsch is one of the few men of this country who grows auriculas well. Fancy, in England there exists an Auricula Society devoted entirely to that little gem, while here we would have to tramp through several states without finding a single plant. Climate against it, I guess.

Coming home we passed the celebrated hybridising establishment of John F. Cowell, (The Professor). He has turned out this year the finest petunias the writer ever saw, barring none. His window and veranda boxes are filled, and some day in the distant future they may be all right. At present they are so weakening that carriages and pedestrians go round a block or two to avoid them. At this date there is little hybridising to be done, so the Professor was trying to make a cross between himself and hard work. The result will be interesting to many of us.

Mrs. D. Newlands says she never worked so hard (and she works too hard). Mrs. D. has a large proportion of the floral part of our beautiful Forest Lawn Cemetery, being situated right at the entrance. Mrs. D. has grown a magnificent lot of hydrangeas this year.

Before driving to the barn we tried to interview W. Scott. It was futile. He was so beastly uncivil that we came to the conclusion that "discretion was the better part of valor." He took time to say that the demand for plants for summer decorating was all that was desired, but said although hundreds of beautiful residences had been built in this city within a year, few of them would spend much money the first year in plants and flowers, as they had exhausted their bank account on the new house and lot, carpets, baby carriages, etc. But the flower beds and veranda boxes will all come in due time. Just as soon as Mrs. Petroleum has a nice flower bed Mrs. Natragass will want ditto. W. S.

Boston.

The regular monthly meeting of the Gardeners' and Florists' Club was held Tuesday evening, June 6. The communication from the Chicago Florist Club in regard to the proposed exhibition of floral work at the Columbian Exposition next August was received, and Mr. W. J. Stewart was appointed a committee of one to co-operate with the general committee and represent the Boston club. Messrs. Finlayson, Elliott, Niel, Coleman and Long were appointed a committee to arrange for the annual picnic.

Rhododendrons are now in full bloom and many enjoy the privilege of visiting the estates of Messrs. Hunnewell of Wellesley, Hayes of Lexington and Prof. Sargent of Brookline, where these beautiful shrubs are so extensively grown.

The rhododendron show has been postponed to June 13 and 14.

Manufactures Building at the World's Fair.

The accompanying engraving gives a general view of the huge Manufactures Building, which covers 40 acres of ground. In the immediate foreground is seen one of the electric fountains, while at the left is seen a portion of the basin of the beautiful fountain illustrated in a recent issue. Toward the right is seen one of the columns surmounted by a figure of Neptune.

Baltimore.

Summer is fairly upon us and cool days are "few and far between." Everybody who has a garden has flowers in plenty, particularly roses, and the cut flower men in consequence are not doing much, except in funeral work, which holds its own, though prices are hardly remunerative.

There are rumors abroad of a new firm to start here, who will, so to say, make the boys "get a move on them" to keep up with the trade of the future, and make the city an exporter instead of an importer of cut flowers.

Mr. Wm. Fraser has gone into the seedling "mum" business. His latest is pronounced a great success and "just too sweet for anything."

Sam'l Feast & Sons' new wagon is a new departure in this town, with drop axles letting the floor nearly down to the side walk, top high enough for the tallest plants and brilliant finish; it is a combination of beauty and usefulness.

Halliday Bros. are erecting two model rose houses. MACK.

Chicago.

The last meeting of the Florist Club was not very well attended, and in consequence the reading of Mr. Schiller's paper was deferred. The committee on contest in floral arrangement at the World's Fair in August reported the receipt of numerous acknowledgments from the secretaries of sister clubs of the communication sent them by the committee, saying the matter would be acted upon at their next meeting. One club (Washington) had met since the receipt of the communication and had decided to appoint a committee, and had appropriated the sum of $35 for the purchase of a trophy to be offered in one of the classes. As the ladies are to be present at the next monthly supper, which takes place June 22, it was decided to have a trifle better spread than usual, and the price will be $1.50 per plate. It is expected there will be a large number present at this affair. The new register was examined and very favorably commented upon. It has columns for date, name, city, state and Chicago hotel at which the party is stopping. This register will undoubtedly be of great advantage to visiting members of the trade. Plans for entertaining the members of the S. A. F. while in the city during the week of the contest in floral arrangement in August were discussed and final action deferred until a later meeting. Several designs for the vase which the club will offer as a prize in the floral contest were examined and one selected. The vase will be of solid silver, handsomely engraved, and will be well worth winning. It will cost $100.

Mr. H. Neuberger, the well known San Francisco cut flower grower, with Mrs. Neuberger, spent five days in Chicago the past week visiting the World's Fair. He will make a four months' trip to Europe for health and pleasure, visiting some of the celebrated German bathing places this summer.

Trade has dropped off during the past week and is now quiet. Flowers are plentiful, but suffering from the warm weather. Though there are some good roses to be seen, the greater part of the supply is poor in quality, the flowers being soft and the foliage suffering from mildew. Perles are very fair in quality, but pink roses are losing color badly.

There is a decided scarcity of valley, the crops being about over both outside and in, and although the demand is not large it is at times anxiously called for, and we hear of cases where $4 has been paid for it, but it averages $1.50 to $2. This is the only bulb stuff in; tulips, hyacinths and daffodils are all over. Harrisii is about done and callas are taking its place. Carnations are a terrible glut; it is a long time since the market has been so completely swamped by them as it is now, and sellers are glad to get rid of them at any price. Most of them are of fine quality. One point the glut always brings to mind is that the grower who only bunches high class flowers of even quality has the best chance of sales, while stock consisting of good flowers and culls all bunched together, under the impression that the good flowers will sell the poor ones, is very apt to be reserved for the tender mercies of the fakir.

Pæonies are plentiful; white brings the best price, good pinks being next. Gladiolus is very good; so are sweet peas. Very fine corcopsis is received with favor, though there is some complaint that it does not keep very well. Cape jasmine has now ceased coming in; it cannot stand the warm weather. Smilax is plentiful. Trade seems to be settling down to the summer standard.

Among visitors to Chicago this week were E. G. Hill of Richmond, Ind.; A. Blanc of Philadelphia; and James Dean of Bay Ridge, N. Y.

New York.

The hot weather has come in earnest and brought with it a large overstock of roses. They are everywhere, but chiefly with the commission men, who are struggling with the problem how to get rid of them at any price, for the quality is generally poor.

Out-door Jacks and all the other varieties of field and garden flowers are to be seen on the streets and these shut out the indoor roses.

Trade is dull with the retail men. There were a few weddings this week, but they did not seem to make any marked impression on business.

Carnations are abundant and of very good quality, especially McGowans. Red carnations are a drug. American beauties have greatly deteriorated in size and color the past few days and the short stems are far in excess of the long.

Trade is over for the season and all we can expect now is an occasional funeral order and the school closings to save us from the summer stagnation.

Toronto.

Weather beautifully warm and all nature rejoicing. Everybody who has anything to do with a garden professionally or otherwise is busy from daybreak till dusk now, and although the planting out season is comparatively late this year it is doubtful if in a couple of weeks things will not be just as far ahead as other years. Usually the planting out epidemic breaks out about two or three weeks too early, and the poor plants get a serious setback, but now that we have got over the first week in June it is unlikely that there will be any more cold spells.

Earl Derby paid a farewell visit to the city this week. A farewell address was presented to him in the city council chamber, which Park superintendent John Chambers had decorated in magnificent style with palms, ferns, orchids etc., making a grand display. The writer could not help wishing that he could have put the orchids etc. in the Ontario exhibit at the World's Fair, which sadly lacks color, owing to the crotons having lost their foliage. Mr. A. Gilchrist, florist, of Toronto Junction has charge of the above mentioned exhibit now and will probably stay there until the beginning of August; he will be glad to see any of his friends or professional brethren who may be visiting the Fair. North curtain east side, next the dome, Horticultural building.

At last (according to the daily papers), there seems to be a chance of reduced railway fares to Chicago, and the companies are doubtless at last beginning to find out that that is what folks are waiting for, and that large numbers will not go at all unless they come off the perch. The public too is getting up more enthusiasm over the Fair, I think. It is just beginning to advertise its self a little, as every one returning brings back glowing accounts of all there is to be seen there. There will be a big rush before long.

Market trade is very lively now, but owing to the backward season and the consequent short time to do it in, the volume of trade will be no greater, if as great, as last year. In several lines the prices are badly cut.

The prize list of the Toronto Electoral District Society's annual show to be held in the Horticultural Pavilion July 19, and 20, is just published. The florists will have a good chance this year, many of the larger palms and ferns belonging to the public institutions having been sent to the World's Fair. However, there are plenty of plants left behind to make a first class show. Toronto alone with a free hand could have easily filled up the whole east side of the north curtain with specimen plants, and it is much to be regretted that more of Sir David Macpherson's (Geo. Vair, gardener) fine collection could not be procured to show there. E.

OBITUARY.

JAMES LITTLEJOHN died June 6th, at Chatham, N. J., aged 75 years. His whole life was devoted to horticulture, being apprenticed to a gardener at Blair, Drummond in Scotland, in April, 1837. After serving his regular apprenticeship there he served in several large places in Scotland and England, changing from place to place to get a thorough knowledge of his business. After eleven years spent in this way he concluded that America offered a better field for him than his native country, so, to use his own words, he "rolled up his kit in a bundle, put his books in a box, and landed in this country in 1848," not rich in this world's goods, but possessing a fine constitution and determined will to succeed, which he did in a remarkable degree, for wherever he was employed he left the impress of a master hand, and many of the older gardeners around New York who knew him in these days have often remarked to the writer that James Littlejohn was the best grower of plants, fruits, etc., they had ever known.

In 1854 he took charge of a place in Madison, N. J., where the object was to produce roses for the New York market; at that time but few flowers were required for that city's daily supply; but Mr. Littlejohn soon succeeded in producing such superior flowers of the varieties then grown (which were principally Safrano) that they created quite a sensation and the demand always exceeded the supply. And to the late Mr. Littlejohn most emphatically belongs the credit of being the pioneer florist in producing fine roses, from whose ideas have sprung almost all the modern systems of growing the same.

After three years in this place he went to Rhinebeck, N. Y. and took charge of the then Mr. Astor's place, considered at that time as a fine one, where he remained three or four years, but the late Judge Lathrop, of Madison, knowing something of Mr. Littlejohn's abilities induced him to enter his service as gardener to grow grapes, roses, etc., for market, which he did and stayed there till he left in 1872 to start in business for himself in Chatham, where he has resided with his family ever since.

He was always a very hard working and ambitious grower, attending to every detail up to the very time he was taken sick. Of late years he hardly ever went more than a few miles from home, and to many of the younger generation of florists he was not known even by name; with strangers he was slightly reserved, but once the ice became broken many have been surprised at the fund of information he possessed. Always a great reader and student he could converse on any subject and entertain his hearers. His wonderfully clear memory greatly helped him in this respect, as he could refer back to

VIEW OF CANAL BETWEEN THE MANUFACTURES AND ELECTRICITY BUILDINGS.

many interesting subjects for years, relating facts almost as clearly as if they had occurred a few days before.

To his friends, who grieve to lose him, he was always the most kind-hearted genial companion, and no truer friend could be found. He leaves a widow, three sons and two daughters to mourn the loss of a kind, loving husband and father.

JOHN N. MAY.

Canal by Manufactures Building.

The illustration shows a portion of the west side of the Manufactures Building and the canal between it and the Electricity Building. In front of the latter are seen a row of palms in pots as used by the landscape department around a number of the buildings.

Testout and Victoria.

During a recent visit to the establishment of W. W. Coles, Kokomo, Ind., I was much impressed with the good qualities of these two roses as grown at his place.

He has a bench 6x100 of Testout and a more vigorous and healthy bench of roses it would be hard to find. The plants average from four to five feet high, and not a speck of black spot to which La France is so subject) was to be seen. They were planted July 20, last.

Mr. Coles is so favorably impressed with Kaiserin Augusta Victoria that he will bench 1200 plants of it this season, cutting down his usual planting of Brides. He predicts that the Victoria is the white rose of the future.

Mr. Coles already has the materials on hand for an extensive addition to his glass surface, and the increase will be devoted to the two roses mentioned.

Philadelphia, Pa. EDW. REID.

MILBURN, N. J.—Mr. Hart, formerly of Flatbush, is building two fine houses here.

DAYTON, O.—The Highland Floral Co. has been incorporated. Capital stock $25,000.

ST. JOSEPH, MO.—Hans Nielson has sold his stock of plants and leased his greenhouses to Newell & Kidd of Kansas City. They will take possession June 15. Mr. Nielson will retire from the business.

THE Missouri State Horticultural Society held its semi-annual meeting at Columbia, Mo., June 6, 7 and 8.

THE AMERICAN FLORIST and *Gardening* together to one address for $1.75. Send orders to the American Florist Co.

WHEN SENDING us newspapers containing items you wish us to note please do not fail to distinctly mark the item so it can be easily found, as we can not spare the time to hunt through the mass of papers sent us for unmarked items.

DO YOU WANT an alphabetical list of the chrysanthemums in commerce in America, with class and a brief accurate description of each one, and synonyms noted? You will find such a list in our trade directory and reference book.

WE request subscribers to make remittance by draft or money order when renewing subscriptions, and to keep a record of the numbers and dates of same. This is to guard against losses in the mails.

WHEN YOU arrive in Chicago make it a point to at once register your name and hotel in the book kept for the purpose at the headquarters of the Chicago Florist Club, 45 Lake st.

PLEASE WRITE on your printed letter head when addressing our advertisers. If you have no printed letter head, then enclose your business card or bill head.

DO YOU WANT a list of the leading park superintendents of America? You will find such a list in our trade directory and reference book.

PREPARE NOW

FOR OUR

CONVENTION NUMBER

AND

COLUMBIAN SOUVENIR

TO BE PUBLISHED

August 3.

IT WILL BE THE

GREATEST SPECIAL NUMBER

WE HAVE EVER ISSUED.

If your photo was not in last year, send us one NOW. See instructions on page 1180.

AMERICAN FLORIST CO.

P. O. Drawer 164. **CHICAGO.**

METEOR, HOSTE, BEAUTY,

and all the popular FORCING ROSES now ready to plant from 3-inch pots, at usual prices. Also my book on

HOW TO GROW CUT FLOWERS.

A PRACTICAL TREATISE ON

THE CULTIVATION OF THE ROSE,

And Other Flowering Plants for **Cut Flowers**, sent to any address upon receipt of **$2.00.**

M. A. HUNT. Terre Haute, Ind.

HEADQUARTERS FOR

G. SOUPERT

Finest stock ever sent out.

2 -inch	per 100	$ 4.00
2½-inch	"	5.00
3 -inch	"	7.50
3½-inch	"	10 00
4 -inch	"	12.00

Import Bulb List ready. **J. G. VAUGHAN,** CHICAGO.

The Grand New Forcing Rose,

"American Belle."

Prices and full particulars on application.

John Burton, Chestnut Hill, Philadelphia

WATTEVILLES,
METEORS,

BRIDESMAIDS

FRANK L. MOORE,
CHATHAM, NEW JERSEY.

The New White Rose

KAISERIN AUGUSTA VICTORIA.

From 3-inch pots, $25.00 per 100.

JOHN COOK,

318 N. Charles St., BALTIMORE, MD.

Mention American Florist.

ROSES.

TEAS . . . . . $30.00 per 1000
HYBRIDS . . . . . 40.00 per 1000

Healthy plants, in 2-inch pots.
Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.
Trade list on application.

Jacob Schulz,
LOUISVILLE, KY.

ROSES.

PERLES, 2¼ inch, $5.00 per 100.
PERLES, 2¼ inch, $45.00 per 1,000.

JOHN BURTON,
Chestnut Hill, PHILADELPHIA, PA.

ROSES FOR FORCING.

Fine Healthy Stock.

	2½-inch.	3-inch.
AMERICAN BEAUTY	$ 8 00	$11 00
METEOR, extra fine	6 00	9 00
PERLE DES JARDINS	5 00	8 00
SUNSET	5 00	8 00
BRIDE and MERMET	4 50	7 00
NIPHETOS	4 50	7 00
MME. HOSTE	4 50	7 00

5 per cent. off for cash. Orders booked for later delivery.

BROWN & CANFIELD,
SPRINGFIELD, ILL.

ROSES,

STRONG PLANTS,

WRITE FOR PRICES.

Kemble Floral Co.,
OSKALOOSA, IOWA.

FOR SALE.

Out of 4-inch pots.

Brides, Mermets, Bridesmaids, La France, Niphetos, American Beauties, Wattevilles.

This stock is extra fine and cannot be beaten. Prices on application.

Holmedale Greenhouses,
P. O. Box 31. MADISON, N J.

ROSES.

Finest stock in Northwest

Duchess of Albany,	Mme. Hoste,
La France,	Niphetos,
Catherine Mermet,	Perle,
Waban,	Sunset.
The Bride,	W. F. Bennett.

C. A. SMITH FLORAL CO.,
77 7th Street, South, MINNEAPOLIS, MINN.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST. . . . . .
ANCHORAGE ROSE CO., Anchorage, Ky.

CATALOGUE PRINTING. ELECTROTYPING.

Done with expert ability for Florists Nurserymen, Seedsmen. Write to

J. Horace McFarland Co.,
HARRISBURG, PA.

ROSES.

BRIDES, MERMETS, PERLES, LA FRANCE, ALBANYS.

Clean stock from 3-inch pots at $7.00 per 100.

ROBERT F. TESSON,
West Forest Park, ST. LOUIS, MO.

PYRETHRUM ULIGINOSUM. (Hardy.)

The Daisy that blooms in the Fall. Plants in 3-inch pots, $5.00 per 100.

CHRYSANTHEMUMS.

All the leading kinds for cut flowers; in thumb pots, $3.00 per 100; $25.00 per 1000. My selection.

EDWIN LONSDALE,
WYNDMOOR Station: Chestnut Hill P. O., PHILA.
on Phila. & Reading R. R. from 12th & Market Sts.

Roses for Florists.

$50,000 BEST FORCING ROSES.

THE BRIDE, MERMET, BRIDESMAID, PERLE DES JARDINS, PAPA GONTIER.

Samples sent on application.

EDWARD MORAT, 257 Jefferson St., Louisville, Ky

ROSES.

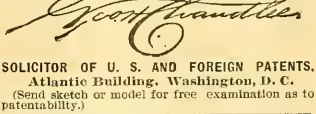
Out of 2¼-inch pots. Good forcing stock.

Mermets	$4.00 per 100;	$35.00 per 1000
Brides	4.00 "	35.00 "
Niphetos	4.00 "	

VIOLETS Marie Louise.

F. W. NORTH, Fostoria, Ohio.

TRADE MARKS. COPYRIGHTS.



SOLICITOR OF U. S. AND FOREIGN PATENTS.
Atlantic Building, Washington, D. C.
(Send sketch or model for free examination as to patentability.)

Always mention the American Florist when writing to advertisers.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

Our Annual Convention Number.

In our Convention Number for 1893, which will also be a Columbian Souvenir as well, we shall repeat the plan of identification by portraits as inaugurated at the Convention in Washington last August. This plan solved the identification problem with such general satisfaction and was so generally made use of that we believe no explanation of its workings is now necessary.

Are you a member of the Society of American Florists? If so, do you expect to be present at the Convention in St. Louis next August? If not now a member do you expect to join while at the St. Louis meeting? If so, and you were not represented among the portraits given in our Convention Number of 1892, please send us a cabinet size photograph of yourself, being careful to write your name and address plainly on back of same. If you have no recent photograph, have one taken now, and send us a copy as soon as ready. If you intend to take your wife with you to the convention (and you ought to do so if possible) send us a copy of her photograph also, as our identification plan includes the ladies too.

This number will contain in addition to the portraits and indexes to same, a complete guide, *at date*, to the Horticultural Department of the World's Columbian Exposition at Chicago, which will certainly be visited by all members of the Convention after the adjournment of the St. Louis meeting. Diagrams of each section of the Horticultural display will be given and the location of each exhibit plainly indicated so it may be quickly located by any one. These will be accompanied by an alphabetical index to exhibitors and a classified list of exhibits, each referring to position on the diagrams; together with fine half tone plates of special features.

Full details regarding the great Horticultural Congress will also be given in this number, and it will be such a "Columbian Souvenir" as you will want to preserve for all time.

THE prize-list for the annual flower show of the Toronto Electoral District Society, to be held July 19 and 20, has been issued, and copies may be had on application to the Secretary, Mr. J. P. Edwards, 17 Washington Ave., Toronto, Ont.

ANOTHER carload of cacti for A. Blanc & Co.'s exhibit has arrived. It contains some monster plants 14 feet high and weighing a ton each. They promise to be a most valuable addition to the display. One Echinocactus Leconti, over 6 feet high, is said to be 150 years old.

ORCHIDS.

I am handling the finest stock of Cut Orchids grown in this country and can supply them in any quantity. Also all other Choice Flowers.

T. J. CORBREY,

Wholesale and Commission Florist,

Consignments Solicited. **45 Lake St., CHICAGO.**

BOUQUET GREEN, • • • • • • • HARDY CUT FERNS.

EVERYTHING GREEN

At H. E. HARTFORD'S,

18 Chapman Place. BOSTON.

Asparagus Plumosus Nanus.

CUT STRINGS: 6 to 10 feet long, 50 cents each. 12 to 18 feet long, $1.00 each.

In large or small quantities all the year round. The largest stock in the country.

W. H. ELLIOTT, Brighton, Mass.

THE SMILAX KING!

Who? KOFFMAN,

Where? WALDEN. Orange Co., N. Y.

What? **SMILAX**

25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.

When? ALL THE YEAR AROUND.

And he pays the Express.

SMILAX

12 CENTS PER STRING.

First-class, well-seasoned stock.

THE NATIONAL PLANT CO., Dayton, Ohio.

CUT SMILAX,

15 cts per string till November 1st. Quality first-class. Special attention to orders by wire.

J. E. BONSALL & SON, 30B Garfield Ave., Salem, O.

WHOLESALE FLORISTS

La Roche & Stahl

N. E. CORNER 13th & Chestnut Sts., PHILADELPHIA.

SAMUEL S. PENNOCK,

Wholesale Florist

REMOVED TO REAR OF 42 S. 16th ST., Philadelphia, Pa.

WISCONSIN FLOWER EXCHANGE,

131 Mason St, MILWAUKEE,

WHOLESALE

Cut Flowers AND Florists' Supplies,

BULBS, ETC.

JULIUS TESMER & CO.

Manufacturers of all kinds of

Ice Boxes

AND STORE FIXTURES,

937 to 943 N. Western Ave., CHICAGO.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.

	Per 100
Perle, Gontier, Niphetos	$3.00@$4.00
Mermets, La France, Bride	4.00@ 5.00
Meteors	6.00
Carnations, short	1.00
" long	1.50
Valley, Tulips, Narcissus	2.00@ 3.00
Adiantum	1.00
Callas, Harrisii	8.00@12.00
Smilax	16.00@18 00
Pæonias	6.00
Asparagus Plumosus	50 00

In effect till next issue of this paper.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
126 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.; Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange.
45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY,
Wholesale and Commission
FLORIST,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

A. G. PRINCE & CO.,
Wholesale and Commission
FLORISTS,
45 LAKE STREET,
In Chicago Cut Flower Exchange. CHICAGO.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

Wholesale Markets.

Cut Flowers.

NEW YORK, June 13.

Roses, Gontier, Perle, Niphetos	1.00@ 2.00
" Mermet, Bride, Hoste	1.00@ 3.00
" Cusin, Watteville, Meteor	1.00@ 3.00
" Bridesmaid, La France	3.00@ 5.00
" Jacqueminot, Testout	1.00@ 8.00
" Beauty, Hybrids, Moss buds	5.00@15.00
Carnations	.50@ 1.00
Valley	2.00@ 4.00
Longiflorum	6.00
Cattleyas	50.00
Mignonette	1.00@ 2.00
Sweet Peas, per bunch	.04@ .10
Adiantums	1.00
Smilax	10.00@15.00

BOSTON, June 13.

Roses, Niphetos, Gontier	3.00@ 4.00
" Perle, Sunset	3.00@ 4.00
" Bride, Mermet	3.00@ 6.00
" Jacq., Hybrids	10 00@15.00
Carnations	.75@ 2.00
Longiflorum	4.00@ 6.00
Candidums	3.00@ 4.00
Lily of the valley	2.00@ 3 00
Pansies	.25
Gladioli	8.00@10.00
Peas	1.00
Spiræa	2.00
Stocks	2.00
Adiantum	1.00
Smilax	15.00@17.00
Asparagus plumosus	50.00@100.00

PHILADELPHIA, June 13.

Roses, Beauties	20.00
" La France, Bride	4.00
" Cusin, Watteville	3.00
" Perle, Gontier, Sunset	2.00
" Outside Jacks	2.00@ 3.00
Valley	4.00@ 5.00
Carnations	.75@ 1.00
Asparagus	50.00@75.00
Smilax	18.00@20.00
Adiantum	.75@ 1.00
Callas	8.00@10.00
Sweet peas	.50@ 1.00
Cornflower	1.00
Peonies	4.00

CHICAGO, June 13.

Roses, Perles, Niphetos Gontier	5.00
" Mermet, La France, Albany	3.00@ 4.00
" Brides, Wootton	3.00@ 4.00
" Beauties	5.00@15.00
" Meteors	5.00
Carnations	1.00@ 1.25
" fancy	2.00
Callas, Harrisii	6.00@ 8.00
Gladiolus	6.00@ 8.00
Sweet Peas	1.00
Pæonies	3.00@ 5.00
Stocks	2.00
Coreopsis	.75
Smilax	16.00@18.00
Adiantum	1.00
Asparagus	50.00

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

WHOLESALE
FLORISTS,
JOBBERS IN . . .
. . FLORISTS' SUPPLIES,
FLORISTS' VASES.
METS,
BRIDES,
GONTIERS,
CARNATIONS,
ALWAYS ON HAND.
1 Music Hall Place,
BOSTON, MASS.
HORTICULTURAL AUCTIONEERS. . .
Mention American Florist.

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., BOSTON, MASS.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser in these columns.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
The finest Roses, Violets and Carnations
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE
FLORIST,
1122 PINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STEET,
St. Louis, Mo.

The Seed Trade

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1883. Applications for membership should be addressed to Wm. Meggatt, chairman membership committee, Wethersfield Conn.

MR. CLUCAS, with Pitcher & Manda, is visiting Bermuda.

CALIFORNIA SEED CROPS are reported to be looking well June 3rd.

MESSRS. Barteldes and Braslan are reported to be "doing" the coast very thoroughly, but buying little onion as yet.

MR. EARL, representing W. Atlee Burpee & Co., will make a European trip in the interest of that house, starting this month.

VISITED CHICAGO: S. L. Allen, Phila.; Phil. Stimmel, Frank T. Emerson, L. L. Morse, Santa Clara; Wm. Tell, W. Kelway, A. Blanc.

ONE of the largest Dutch importers of bulbs writes us under date of May 12th, that there has been very little rain in Holland since the first of March, excepting one shower about May 3rd. The bulbs therefore are dying off very early, and exceptionally so where the soil is light and poor.

YOU CAN'T AFFORD to do business without a copy of our trade directory and reference book.

WHEN writing our advertisers please use one of your printed business letter heads or enclose your business card.

YOU CAN never invest $2 to better advantage than in a copy of our trade directory and reference book.

When writing to any of the advertisers on this page please mention the American Florist.

FOR SALE.
THE CUTS
USED IN ILLUSTRATING THIS PAPER.
Write for prices on any which you have seen in previous issues and would like.
AMERICAN FLORIST CO.
CHICAGO.

GREENHOUSE HEATING.
BY A. B. FOWLER.
Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.
It is highly commended by Mr. John Thorpe and others. Postpaid, 75c.
Sent on receipt of price. Address,
AMERICAN FLORIST,
CHICAGO.

SEND FOR A COPY
— OF OUR —
TRADE DIRECTORY
AMERICAN FLORIST CO., CHICAGO

PREPARE NOW FOR OUR CONVENTION NUMBER AND COLUMBIAN SOUVENIR. SEE PAGE 1180.

LILIUM HARRISII.
Original and largest growers of this important bulb.
OUR SPECIALTY!
True Stock. Lowest Prices. Best Quality.
F. R. PIERSON CO.,
TARRYTOWN-ON-HUDSON, NEW YORK.

FREESIA BULBS, Refracta alba, strong flowering bulbs $1.00 per 100; $9.00 per 1000.
By mail postpaid.
R. MANN & SON, Lansing, Mich.

WANTED.
FRESH POPPY LEAVES. Send sample.
DR. DUCKER, LOUISIANA, MO.

WANTED—CARNATIONS,
in 2½-inch pots, 800 Lizzie McGowan; 400 Portia; 400 Grace Wilder. Also 1000 Marie Louise Violets. Please send lowest prices at once to L. M.
care E. E. Bartleson, 24th St., Chester, Pa.

Write for Wholesale List.
MICHEL PLANT AND BULB CO.,
ST. LOUIS, MO.

Special Offer
FOR THE NEXT SIXTY DAYS.

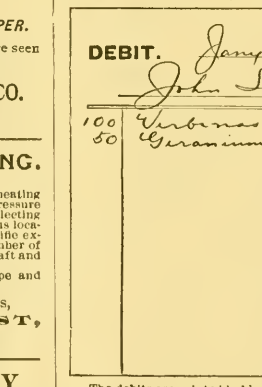
	Per 100
Araucaria Excelsa, 2½-inch pots	$50.00
Grevillea Robusta, 12 to 18 in. high	4.00
Begonia Argentea Guttata, 2½-in. pots	3.00
" Rex in varieties, " "	3.00
" Gigantea Rosea, " "	3.00
Dracæna Indivisa, 12 to 18 in. high	2.50
Fuchsias, Mrs. E. G. Hill and Phenomenal, 2½-inch pots	2.50
Fuchsias in choice assortment, 2½-in. pots	2.00

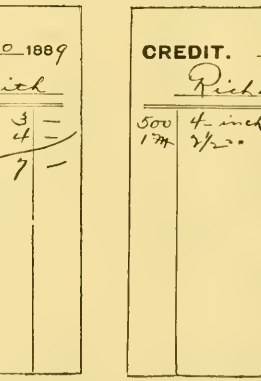
Address WALKER BROS., Florists,
LAPEER, MICH.

J. W. Eldering,
CUSTOM-HOUSE BROKER and FORWARDER
78 Barclay St., New York.
Solicits the favor of your shipments for the coming season. Prompt and careful attention guaranteed. Charges reasonable.

Choice Lily of the Valley Pips.
Ernst Reimschneider, Altona, Hamburg.
For Fall Importation. Catalogues free on application to his sole agents.
C. C. ABEL & CO., P. O. Box 920, New York.

We can now furnish in any quantity desired Debit and Credit Tickets of which we give below samples reduced one-half in size.





The debits are printed in black and the credits in red, so they can be readily distinguished. They are put up in blocks of 100; 50 of each, pinned back to back; thus but one block will have to be carried. By means of these tickets an entry of a sale or receipt of goods can be made anywhere—in the house or in the field—and afterwards filed. Tickets for each transaction in your business will make data from which a bookkeeper can readily work. With this simple and easy means of keeping a record of your business can you afford to neglect so important a matter?

Price of Tickets, postpaid, 100, 20c.; 200, 35c.; 300, 50c.; 500, 75c.; 1000, $1.40.

AMERICAN FLORIST CO.,

HYACINTHS, TULIPS,

DAFFODILS, NARCISSUS, LILIES,

And all other bulbs for forcing and outdoor, in very fine quality, at reasonable rates.

If any of our friends have not received a copy of our Catalogue of 1893, should write for one at once.

Please DO NOT DELAY ordering.

SEGERS BROTHERS,

WHOLESALE BULB GROWERS,

LISSE, near Haarlem, **HOLLAND.**

HULSEBOSCH BROS., BULB AND PLANT GROWERS,

OVERVEEN, near Haarlem, HOLLAND.

	Per 100	1000
Lilium Harrisii, 4 to 5-inch in circ.	$2.20	$19.00
" " 5 to 7-inch in circ.	3.00	24.00
" " 7 to 9-inch in circ	5.25	47.00
" " 9 to 12-inch in circ.	11.00	100.00
Lilium Longiflorum 10 per cent dearer than Lilium Harrisii.		
Roman Hyacinths, extra selected	2.50	22.00
" " " top roots	3.00	25.00
Narcis. Totus Albus, extra selected	1.00	7.50
" " " Grandiflor'm. ext. s'le'd	1.30	11.00

Fall Wholesale Catalogue now ready. Address

A. HULSEBOSCH,

P. O. Box 3118. Warehouse 58 West Street, NEW YORK CITY.

BENJAMIN RIMBAUD, BULB GROWER,

Quartier du Temple, Toulon, var, France.

Cable address Benrimbaud, Toulou.

The largest cultures in the South of France, of **WHITE ROMAN HYACINTHS,** Narcissus Paper White grandiflora, N. Double Roman, N. **Double Von Sion,** true pure yellow, and other Daffodils. **Lilium Candidum,** the largest bulbs. Freesias, Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A. Double Rosette the earliest, etc. Prices on application.

Mention American Florist

Choice Dutch Bulbs

AND NEW VARIETIES OF ATTRACTIVE BULBOUS PLANTS, GROWN BY

C. G. VAN TUBERGEN, JR.,

Haarlem, Holland.

For Fall Importation, catalogues free on application to his sole agents

C. C. ABEL & CO., P. O. Box 920, New York.

Phœnix rupicola.

This useful and beautiful Date Palm in **EXTRA FINE PLANTS,** growing in from 7 to 10-inch pots, from $3.50 to $7.50 each, according to size.

EDWIN LONSDALE, Wyndmoor,

STATION "G," (Chestnut Hill P. O.) PHILADELPHIA.

GT. VAN WAVEREN & KRUYFF,

GROWERS OF

Hyacinths, Tulips, Crocus, Daffodils,

LILIES, ETC., ETC.

SASSENHEIM, Haarlem, HOLLAND.

ESTABLISHED 1866.

R. VAN DER SCHOOT & SON,

HILLEGOM, - HOLLAND,

Largest Growers of

HYACINTHS, TULIPS, NARCISSUS, SPIRÆA, LILIES OF THE VALLEY, ETC.

HEADQUARTERS FOR HIGH GRADE FORCING BULBS.

Wholesale Importers should write us for Prices.

OUR NEW TRADE LIST NOW READY.

Mention American Florist.

We Sell Bulbs!

Special Prices on Application.

Weeber & Don

Seed Merchants and Growers,

114 Chambers St, NEW YORK.

Fresh From Japan.

Sound Bulbs of

Lil. Auratum, 7 to 9 inch, $9.00 per 100.
Lil. Rubrum, 7 to 9 inch, $9.00 per 100.

Import prices on first class Fall Bulbs way down.

W. W. BARNARD & CO.,

6 and 8 N. Clark St. CHICAGO.

Lily of the Valley Bulbs.

THE **STAR** BRAND

SPECIALLY RECOMMENDED FOR LATE FORCING.

We are now booking Import orders for shipment from Hamburg in October or November.

REISS & BRADY,

280 Washington Street, New York.

G. J. MOFFATT,

Manufacturer of

PAPER BAGS AND ENVELOPES

Special attention given to

Seed Bags and Catalogue Envelopes.

NEW HAVEN, CONN.

Mention American Florist.

The Nurserymen's Convention.

The American Association of Nurserymen began its annual session last Wednesday at the World's Fair grounds, Chicago. About 250 members were in attendance at the opening, but the next day the attendance was light, the attractions of the Fair seeming to prove greater than those of the meeting to most of the members.

Of the lengthy list of papers on the program only four were read. These were as follows: "Ultimate results of the World's Fair exhibits of fruits and flowers," by Prof. L. H. Bailey, Ithaca, N. Y.; "Nurserymen and forestry," by Prof. B. E. Fernow, Washington, D. C.; "Thoughts on evergreens," by Rob't Douglass, Waukegan, Ill.; "Reform in nurserymen's catalogues," by H. E. Van Deman, Washington, D. C. Other papers that had been prepared but not read were ordered printed in the annual report.

Officers for the ensuing year were elected as follows: President, U. B. Pearsall, Ft. Scott, Kans.; Vice-President, W. F. Heikes, Huntsville, Ala.; Secretary, F. Seager, Rochester, N. Y.; Treasurer, N. A. Whitney, Franklin Grove, Ill.

NEW ORLEANS.—While it is a fact that Mr. R. Maitre has sold his store, he has not entirely withdrawn from the trade as reported. He still conducts his "Home of Flowers," corner of St. Charles avenue and Clinton street.

OGDEN, UTAH.—A. A. Gibbons & Co. will add two new houses, one 12x100 and the other 20x50, short-span-to-the-south style. This firm started in business last fall and reports trade good.

FREEPORT, ILL.—The Freeport Nursery Co. has been incorporated. Capital stock $75,000. Incorporators, J. W. Miller, C. J. Wells and H. T. Hanks.

NEW BEDFORD, MASS.—Herbert V. Sowle, formerly of Wyoming, has located here and is building two houses 16x100.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant adva. not admitted under this head.

SITUATION WANTED—By married man, good place as gardener; experienced. Good references.
Box 35, Oconomowoc, Wis.

SITUATION WANTED—By experienced gardener; single, age 35; best of references; either private or commercial. Address
FRANK OTTO, 583 Lincoln Ave., Chicago.

SITUATION WANTED—By practical gardener; 15 years' experience in growing fruit, flowers and vegetables. English; age 36; married. Address
TOM DAVIES, 271 Etna St., Newburgh, Cleveland, O.

SITUATION WANTED—By 1st of July as working foreman or manager; thorough experience in growing plants and cut flowers—roses especially. Age 27; married, no family. Address
H. box 122, Catonville, Md.

SITUATION WANTED—By a first-class gardener; married, two grown children; 20 years' experience in this country in the growing of roses and general stock of plants. The best of references. Address
M C. care American Florist, Chicago.

SITUATION WANTED—By a practical rose grower as a working foreman; 14 years experience among forcing roses. Married, sober and reliable. Satisfaction guaranteed or no pay expected. Address
A F G, 1137 & 1139 Liberty Ave., Pittsburg, Pa.

SITUATION WANTED—By young florist; German descent; 7 years' experience in general greenhouse work; able to take charge of place. Good references. Private or commercial place. State wages. Address
F. QUICKERT, 617 Reservoir Ave., Milwaukee, Wis.

SITUATION WANTED—By a well educated christian young man, 22 years old, speaking English and German, with 5 years' experience in roses, carnations and pot plants; also 5 months in flower store, as helper. Address H W, care Am. Florist, Chicago.

SITUATION WANTED—Gardener of executive ability and experience in the management and propagation of all commercial requisites connected with horticulture—ornamental, the nurseries, etc.—wishes situation accordingly. Best of references. Address A Z, care American Florist, Chicago.

WANTED—A propagator; none but best need apply.
R. J. MENDENHALL, Minneapolis, Minn.

WANTED—Single man of energy and ability for roses and cut flower stock. Address with terms and experience,
J. T. WILLIAMSON,
Prop. La rose Gardens, Memphis, Tenn.

WANTED—A single man who has had some experience in greenhouse work. State wages expected, including board. Address JOHN B. GOETZ,
2165 Mackinaw St., Saginaw, W. S., Mich.

WANTED—Married man who is a good rose grower, as working foreman in a commercial place. To a reliable man a permanent situation and good wages. Address, with copy of reference from last employer,
P. O. Box 230, Madison, N. J.

WANTED—Young man for general greenhouse work; must understand the business; one who understands glazing. Wages $15 to $20 per month and board. Well recommended from last place. Address
L. Station L, Tacony, Philadelphia, Pa.

WANTED—For large commercial retail place in Chicago, single or married, bright, active and temperate man; must have good knowledge of cut flower and plant growing, also of steam heating. Do not answer if afraid of work and have not filled such a place before. Must have good recommendations. Wages $35 and board, or $12 a week and three nice rooms, with raise if satisfactory.
ALBERT FUCHS,
Evanston Ave., and Sheridan Boul., Chicago.

FOR SALE—2,500 feet 4-inch pipes and fittings. Half price. Address
MRS. GEO. WALDBAUER, Saginaw, Mich.

FOR SALE—Hitchings saddle boiler No. 3; heats 450 feet 4-inch pipe; used two seasons. Price $30. Address W. H. SALTER, box 57, Rochester, N. Y.

FOR SALE CHEAP—Sectional boiler, 7 sections; 21,000 ft. 4-in. pipe. Also small Wilks boiler for propagating bench.
A. FUCHS,
Evanston Ave. and Sheridan Boul., Chicago.

FOR SALE CHEAP—Second hand No. 1 Exeter boiler, 18 sections, 25 horse power, as good as new; steam gauge, water gauge all complete. Price $300. This is half the price of new. Address
J. G. BURROW, Fishkill, N. Y.

FOR SALE—Controlling interest in old established seed store. Contracts for 1896 nil placed. Large growers of onion sets. Must get out of business on account of failure of my eyes. Suitable terms on good security. Address
SEEDSMAN, care American Florist.

FOR SALE OR RENT—A valuable florist establishment near railroad depot, containing about 15,000 feet of glass. Apply JACOB MENDEL, Nyack, N. Y.

TO EXCHANGE FOR ROSES—1000 good, strong transplanted smilax, January sowing. Want Perles, Gontiers, Brides and Mermets.
SEMINARY GREENHOUSE, Mt. Carroll, Ill.

SPLENDID OPPORTUNITY—To let on lease for eight or ten years, a large property for greenhouses in most desirable locality; extra good home market; church near by, street cars running past premises, and within twenty minutes' ride of public buildings. Address J. W. Moore, St. Vincents' Seminary, Germantown, Philadelphia, Pa.

FOR SALE OR RENT.

Nice greenhouse in the most fashionable part of the city, at a bargain. Cost to run it per month, including rent of $42.00, is $100.00. Receipts will average $300.00 per month, and can be increased. Good reasons for selling. Address
W. B. LEEDY & Co., Birmingham, Ala.

FOR SALE AT YOUR OWN PRICE.

We have 200 English Ivies, vigorous, 3 to 6 feet of vine, which we will ship to the party who will make the best offer for them by the 21st of June. If you can use them at any price give us your bid to-day.
Joseph E. Bonsall & Sons, Salem, O.

FOR SALE.

The well known commercial establishment of W. L. Smith, Aurora, Illinois. Plant consists of fifteen greenhouses, one, two or six acres of land. Houses all in good repair and splendidly stocked. Immediate possession. Address
W. L. SMITH, Aurora, Ill.

FOR SALE.

Will sell, to best cash offer received before July 1st, the following:
1 Wheatland boiler No. 5, 900 feet 4-inch pipe, 800 feet 1-inch pipe, 2,500 square feet of glass 10x12 single, 30 hotbed sash 3x6.
S. B. FIELD, Roselle, N. J.

FOR SALE.

We offer our greenhouses and label business for sale, including the land on which the greenhouses stand. For information, inquire at the office of
H. W. WILLIAMS & SONS,
BATAVIA, ILL.

"CHRYS-COLA."

COLEUS

Golden Bedder, Verschaffeltii, Golden Verschaffeltii, Hero, Yeddo, Firebrand, Firecrest, J. Goode, Chicago Bedder.
Plants from 2¼ and 2-in. pots.

$1.50 per 100; $12.50 per 1000

—CASH WITH ORDER—

If order cannot be filled, will notify by wire.

S. B. FIELD,
Roselle, N. J.

Surplus Plants at Half Price.
2000 FANCY-LEAVED CALADIUMS,
Fine 2½-inch pot plants.....at $5.00 per 100.
BLUE AFRICAN WATER LILY,
From seed pans.....at $1.00 per 12
ROOTED CUTTINGS OF ALTERNANTHERA,
at.....$6.00 per thousand.
Address F. J. ULBRICHT, Florist,
P. O. Box 655, ANNISTON, ALA.

Helianthus Maximillianus
This noble perennial herbaceous Sunflower grows to the height of ten (10) feet in good rich soil, and blooms in the Fall, throwing grand spikes of its beautiful single flowers.
Strong plants, $1 per doz.; $6 per 100.
EDWIN LONSDALE,
WYNDMOOR, near Chestnut Hill, PHILADELPHIA.

TRY DREER'S GARDEN SEEDS,
Plants, Bulbs & Requisites.
They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.
HENRY A. DREER,
Philadelphia, Pa.
Mention American Florist.

FOR SALE.
The Oldest Seed and Florists' Stand in New Orleans
on account of retiring from store business, a large selected stock and good patronage from the best class of customers in the city. Address
R. E. SIMONS,
NEW ORLEANS, LA.

FOR SALE OR TO RENT.
The following greenhouse property, situated on the outskirts of Springfield, the City of Houses; or will sell Greenhouses, Stock and Fixtures and give ten years' lease of 2 acres land. Ten houses in all—5 houses, 10 feet wide, 65 feet long; 4 houses, 18 feet wide, 65 feet long; 1 house, 18 feet wide, 65 feet long. Steam plant! New double Florida Boiler. Stock in good condition, with a large and extra good home market. This is an opportunity in a life-time, as present owner has other interests to look after. If you are looking for a chance, apply at once to
N. D. WINTER,
5 Elm Street, SPRINGFIELD, MASS.

Special Offer

FOR THE NEXT THIRTY DAYS.

LATANIA BORBONICA.
5-inch pots, strong, per doz., $9.00,
4-inch " " " $6.00.
3-inch " " " $2.00; per 100, $15.00.
2½-inch pots, strong, per doz., $1.00; per 100, $8.00.

PANDANUS UTILIS.
5-inch pots, extra strong, per doz., $6.00.
4-inch " " " " $4.00.
3-inch " " " " $2.00.

ARECA LUTESCENS, 2½-in. pots per 100 $10.

ASPARAGUS TENUISSIMUS.
3-in. pots, per doz., $1.00; per 100, $8.00.
2½-in. pots, per doz., 50c; per 100, $4.00.

CYPERUS ALTERNIFOLIUS.
4-inch pots, per doz., $1.25.
3-inch pots, per doz., 75c.
2-inch pots, per doz., 50c.

Address **NATHAN SMITH & SON,**
167 W. Maumee St.,
ADRIAN, MICH.

Association "Flora"

BOSKOOP, HOLLAND

NURSERIES.

Roses, Clematis, Shrubs, Azaleas, Palms, Herbaceous Plants, Bulbs, Etc.

Catalogue on Application.

P OUWERKERK,
206 Cambridge Ave., JERSEY CITY, N. J.

SMILAX.

3000 strong plants.....at $18 00 per 1000.

ROSES.

2000 Niphetos.....at $4.00 per 100.

Address **THE FLORAL EXCHANGE,**
614 Chestnut Street, PHILADELPHIA, PA.

CANNAS.

Pot grown first-class plants.

ALPHONSE BOUVIER, J. D. CABOS, GUSTAV SENNHOLZ, $4 per doz.

These fine pot plants are far superior to the single eyes usually sold by florists.

W. W. COLES, Kokomo, Ind.

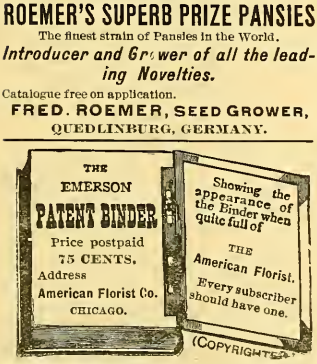
ROEMER'S SUPERB PRIZE PANSIES

The finest strain of Pansies in the World.

Introducer and Grower of all the leading Novelties.

Catalogue free on application.

FRED. ROEMER, SEED GROWER,
QUEDLINBURG, GERMANY.



Always mention the AMERCAN FLORIST when writing to advertisers.

SMILAX.

Good, stocky little plants once reset, they can be packed very light and are cheap of transportation, cheap in price and not dear at the end. A sample will cost only 10 cts. and convince you. **Price, per 100 75 cts.; per 1000 $6.00.**

Watch for my pansy ad. soon, it will have some new facts.

TERMS CASH

L. B. 496. **ALBERT M. HERR, LANCASTER, PA.**

Carnations All Sold

We still have some Fine Plants of

The Best Yellow Canna, **NELLIE BOWDEN,** 75c each. $8.00 per dozen

JOHN McGOWAN, - - Orange, N. J.

Swainsona galegifolia alba.

Nice young plants in 2¼in. pots, $3.00 per dozen. **STOCK LIMITED.**

EDWIN LONSDALE,
WYNOMOOR, near Chestnut Hill, PHILADELPHIA.
Money Order Office, Station "G," Phila.

Siebrecht & Wadley,

ROSE HILL NURSERIES,

NEW ROCHELLE, N. Y.

Palms, ORCHIDS Roses,

and New Plants.

FRESH DRACAENA CANES NOW READY.

ORCHIDS.

The Finest Stock in the World.

SANDER'S,
ST. ALBANS,
ENGLAND.

Thirty minutes from London.

Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City.

Orchids Cheap as Good Roses.

BRACKENRIDGE & CO.,

Established 1854. **Govanstown, Md.**

PRICE LIST FREE.

1,000,000 CANE STAKES

HEADQUARTERS for WATER LILIES

Now is the time to plant all tender and tropical varieties without risk and loss. Secure your stock early. Prices moderate. Send for Catalogue.

WM. TRICKER, DONGAN HILLS, NEW YORK.

6,000 Alternanthera paronychioides major and aurea, at $5.00 per 100.
6,000 Echeveria glauca, 2½ to 3-inches in diameter, $3.00 per 100; $25 00 per 1000.
3,000 English Ivies, 3 to 4 feet high, from 3½-inch pots, $5.00 per 100.
5,000 Smilax, from 2-inch pots, $2.00 per 100.
5,000 Mountain Daisies, red and white, $2.50 per 100.
Coleus Golden Bedder and Verschaffeltii, from 2½-inch pots, $3.00 per 100; from 3½-inch pots, $4.00 per 100.

JOHN RECK, BRIDGEPORT, CONN.

Cycas Revoluta

The Largest and Best Selected Stock of Cycas Revoluta, fronds and roots cut off, true long leaved variety, now on hand.

For general Japanese and Australian stock, apply to

F. GONZALEZ & CO.,
303-312 Wayne St., SAN FRANCISCO, CAL.
☞ Send for catalogue

E. G. HILL & CO.,

Wholesale Florists

RICHMOND, INDIANA.

FIELD GROWN CARNATIONS.

50,000 Ready in the Fall.

W. R. SHELMIRE,
CHESTER CO., AVONDALE, PA.
Correspondence Solicited.

CARNATIONS.

A SPECIALTY.

Full stock of all the new and leading varieties. Rooted Cuttings, Young Plants, and Field Grown Plants in season. Get our prices before purchasing.

GEO. HANCOCK,
GRAND HAVEN, MICH.

Carnation Daybreak.

A few hundred fine boxed-off plants of this valuable sort . . . . . $5.00 per 100
PURITAN, ditto . . . . . 4.00 "
NELLIE LEWIS, ditto. . . . . 4.00 "
All ready for immediate planting in open ground. Order at once.

H. E. CHITTY, Paterson, N. J.

CARNATIONS

Rooted Cuttings all sold or planted out.

FIELD GROWN PLANTS IN SEASON.

Correspondence Solicited.

C J. PENNOCK, THE PINES,
Chester Co., KENNETT SQUARE, PA.

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

ROOTED CUTTINGS of CARNATIONS

By the Wholesale.

Ready now. This is the best time for intending buyers to supply themselves. offer them at moderate prices. Send for Price List. Address

JOSEPH RENARD, Unionville, Chester Co., Pa.

ROOTED CUTTINGS

Of the Best Old and Most Promising new varieties of

CARNATIONS.

Write for a catalogue and send list of wants for an estimate.

J. J. Styer,
CONCORDVILLE, PA.

St. Louis.

During the past week the demand has been very good for this season of the year, the first half being exceptionally so. At present, however, things are slackening up somewhat preparatory to the usual summer season. At a fashionable wedding celebrated during the week, the bride's and bridesmaids' bunches were made after the French style, that is with French bows of ribbon worked amongst the flowers and standing about three inches above them, the flowers used being bride roses edged with mysotis, the ribbon blue and having the end of the streamers decorated with mysotis. The design is something new here and is quite pretty when well worked out. The pews in the church were also decorated with flowers and ribbon in the same style, the flowers used however, being white paeonies, which were also largely used in decorating the house.

On Thursday, the 8th, the regular monthly meeting of the club was held, preceded by a meeting of the finance committee having in charge the entertainment of the S. A. F. The reports of the various committees showed quite an amount of work accomplished, with the prospect of everything working along very smoothly. Considerable interest was manifested by members of the club in the selection of a button to be worn by club members as a means of identification during the convention. This matter had been up for discussion at former meetings and considerable heat displayed. This time was no exception to the rule, and owing to a slim attendance the matter was laid over and made a special order for the next meeting. A communication was read from the Chicago Florists' Club relative to the competition in floral work to be held in Chicago the week after the convention, and a committee was appointed as suggested, consisting of Geo. Ostertag, Alex. Waldbart and J. M. Jordan.

Superintendent of the trade display, Mr. Michel, reports applications for space coming in at quite a rapid rate, and says the prospects are good for a fine display. Mr. Jablonsky, who was drowned out this spring, has had another streak of hard luck in the shape of a dishonest employee, who collected for goods delivered and made no mention of the fact. It is understood that at present he is in Chicago.

The bowling club meets every week, and several new members are generally added. No record breaking scores are made, but all have settled down to steady work and quite an improvement is noted in the general averages. In a short time a regular team is to be selected and started in to practice for the contest.

R. F. T.

Alternanthera Aurea Nana.

Per 100 ..... $ 2.50
Per 250 ..... 5 00
Per 1000 ..... 20.00

NATHAN SMITH & SON,
167 W. Maumee St., ADRIAN, MICH.

D. H. ROBERTS,
159 & 161 South 5th Ave., New York.
NATURAL GAS MADE GLASS
for Rose Houses, Conservatories, etc., etc.
Our glass received the highest award at the Boston Convention of the S. A. F.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

CANNA EXPLORATEUR CRAMPBEL
Flower as large as BOUVIER; color a clear vermilion scarlet, tinted with crimson spots distributed evenly over the petals. Flower spikes large. We claim it to be the largest and most showy deep red flower of all the new Crozy kinds. Per dozen, $6.00; per 100, $40 00.

ALPHONSE BOUVIER and J. D. CABOS, per dozen, $4.00.
FLORENCE VAUGHAN, the sensation of the year, each, $2 50.

J. C. VAUGHAN
NEW YORK: 26 BARCLAY STREET. CHICAGO: P. O. BOX 688.

IMPORTED ORCHIDS.

Cattleya Mossiæ just arrived in splendid condition. East Indian Orchids have arrived. Among them will be a grand lot of Vanda Cœrulea, Cypripedium Insigne, collected in the original district from which all the choicest varieties have come, Cymbidium Eburneum, C. Mastersii, C. Devonianum, C. Giganteum. Also Dendrobium Nobile, D. Farmersii, D. Chrysotoxum, D. Thyrsiflorum, D. Aureum, D. Densiflorum, D. Devonianum, D. Cambridgeanum and other Dendrobes, together with a small lot of Phajus Wallichii and Pleiones. Prices of the above on application.

Of Established Orchids a fine selected stock of Cattleya Trianæ, well established in 6-inch pots and will produce four to eight flowers each next winter. Many very choice varieties will be found among them. Single plants $2.50; 12 for $25.00; 100 for $175.00. Terms sixty days to buyers with satisfactory references, or 5 per cent discount for cash.

IG. FORSTERMAN, NEWTOWN, N. Y.

Two leading Florist Flowers:
CHRYSANTHEMUMS AND ROSES.
ALL THE NEW AND SELECTED STANDARD VARIETIES. . . . . .
My stock of all are as fine as can be produced at reasonable rates.
Complete list of these will be mailed to all applicants in the trade.
JOHN N. MAY, Summit, N. J.

PANSIES from flats, showing flower, fine strain, $1.00 per 100; $7.50 per 1000.
Achillea "The Pearl," from flats, $2 00 per 100.
Rooted Cuttings Evergreens and Shrubs, $2 to $4 per 100.
ROGERS NURSERIES, Moorestown, N. J.
Mention American Florist.

VERBENAS.
In Bud and Bloom. Per 100 P. 1000
Mammoth and general collection, choice assortment, all colors, fine bushy plants.....$ 3.00 $25.00
ROSES—Fine healthy stock.
Perles, Mermets, The Bride, Sunset, Papa Gontier, Niphetos, Bon silene, La France, Souv. d'un Ami, Duchess of Albany, Mad. Cusin, Mad. de Watteville 5.00 45.00
Hybrid Perpetual Roses in bud and bloom, from 5 inch pots, strong plants. 25.00
Tea Roses, in bud and bloom, from 4 and 5 inch pots, strong. .... $10.00 and 15.00
Geraniums, double and single, fine assortment of varieties from 2½ inch pots..... 4.00 35.00
From 3½ inch pots..... 8.00
Heliotrope, strong bushy plants, 3½ in. pots 6.00
Vinca, variegated, strong, 1 year old, bushy 10.00
Lots of other Fine Stock.
Send for new list.
WOOD BROTHERS,
Fishkill, N. Y.

CHRYSANTHEMUMS.
2½ inch, $4 per 100.
SMILAX—1st class, from 2½ inch pots, $2.50 per 100; $20.00 per 1,000. Samples free.
Address J. G. Burrow,
FISHKILL, N. Y.

GERANIUMS.
Fine plants and varieties, 4 inch pots, per 100, $7 50.
Tuberous Begonias, per 100, $3.00 and $2.50, Should be ordered now.
BRAUER & RICHTER,
McCONNELSVILLE, OHIO.

Cyclamens.

	Doz.	Hundred
Select strains, in 3½-in pots	$1.00	$8.00
H. P. Roses, Select named kinds....	1.50	10.00
Smilax, stocky, well-hardened Seedlings, ... per thousand,	6.00	.75

F. A. BALLER,
BLOOMINGTON, ILL.

FILL UP HOUSES FOR SUMMER.
Fine young plants, potted now, will be worth many times the money by autumn.
ALL EXTRA STRONG.

PALMS.	Per 100
Latania Borbonica, 2 inch pots. . .	$ 5 00
Cocos Plumosa, or Weddelliana, 2 inch pots	10.00
Cocos Weddelliana, 3 inch pots	20.00
Areca Baueri, 3 inch pots	10.00
Cocos Plumosa and Weddelliana, strong, from seed boxes	5.00
Latania Borbonica, from seed boxes.	2 00
ORNAMENTAL FOLIAGE.	
Dracæna Terminalis, 2 inch pots	6 00
Dracæna, 20 finest sorts, 2 inch pots. . .	10.00
Ornamental Foliage, 25 beautiful varieties, 2 and 3 inch pots	10.00
Crotons, 20 very fine sorts, 3 inch pots . . .	15 00
Caladiums, 20 very fine sorts, 2 inch pots . .	10.00
Pandanus Utilis, 4 inch pots	25.00
Musa Ensete, 4 inch pots	20 00
FLOWERING PLANTS.	
Citrus Otahitiensis, 2 inch	10.00
" " " extra, in 5 inch . . .	25.00
Achimenes, 6 fine colors, mxd, 5-in. pots, full	25.00
Wistaria Chinensis, 2 inch	5.00

JOHN H. LEY,
ANACOSTIA, D. C.
Mention American Florist.

SAMUEL HENSHAW,
LANDSCAPE GARDENER,
West New Brighton, N. Y.
Arrangement and planting of grounds. Advice given in remodeling old places. Plans and estimates on application.

100,000 SMILAX PLANTS.
From 2-inch pots, for June delivery, at $2 per 100; $15 per 1000. Terms strictly cash. Orders booked now. Address
FRED SCHNEIDER, Wholesale Florist,
WYOMING CO., ATTICA, N. Y.

FROM

The Home of Flowers,

NEW ORLEANS, LA.

CACTUS PILOCEREUS SENILIS, 8 to 12-inch size, each 65c. to $1.25.

CACTUS EPIPHYLLUM TRUNCATUM, 1 to 3 year old grafts on Night-blooming Cereus stock, each 25c., 40c. and 65c.

POINSETTIA PULCHERRIMA, Strong, blooming stock in 3, 4 & 5-in. pots, each 20c., 30c. and 40c.

STEPHANOTIS FLORIBUNDA, Strong, blooming stock in 4, 5 & 6-in. pots, each 30c., 40c. and 60c.

RHYNCOSPERMUM JASMINIOIDES, very strong plants in 4, 5 & 6-in. pots, each 20c., 30c. and 50c.

MAGNOLIA FUSCATA, Good size and strong, 18 to 36 inches high, each 35c. to $1.00.

Address **R. MAITRE,**
St. Charles Ave. cor. Clinton St., New Orleans, La.

TO TAKE PLACE OF WIND MILLS

HOT AIR PUMPING ENGINES

A Windmill

Is unreliable because it depends upon the elements for its power; hydraulic rams also depend upon favorable conditions and waste as much water as they secure. Steam pumps require skill and hand pumps demand labor and time. The

DE LAMATER-RIDER OR DE LAMATER-ERICSSON Hot-Air Pumping Engines

are especially designed for pumping water, and from shallow streams or any kind of well. They are simple, safe and reliable, require no steam and have no valves. They require very little heat to operate them, and can be arranged for any kind of fuel.

Send for illustrated catalogue to

THE DE LAMATER IRON WORKS,
87 South Fifth Av.,
NEW YORK, N. Y.

THE WABASH

. . . WILL BE THE . . .

"FLORISTS LINE"

TO THE ST. LOUIS

CONVENTION, as well as returning.

Write **F. A. PALMER,** Gen'l Pass. Agt.,
201 Clark Street, CHICAGO.

It is expected a party will be made up leaving Chicago about August 7.

JUNE CLEARING SALE OF PLANTS.

	Per 100
Begonias, good assortment	$ 3.00
Fuchsias, 2-inch pots, including Storm King and Phenomenal	2.00
Coleus, 2-inch pots, good vars ..... $12.50 per 1000.	1.50
Pansies	1.50
Alternanthera P. major	2.00
" Aurea nana, Tricolor and Versicolor,	1.50
Mexican Primrose	2.00
Antheimis Tinctoria	2.00
Smilax	2.00
Bryophyllum Calycinum	3.00
Clerodendron Balfouri	3.00
Pothos aurea (Vase Plant), beautifully marked.	6.00
Rosemary, 4-inch pots ..... each 10c.	

ROBT. S. BROWN & SONS,
1315 Wabash Ave., KANSAS CITY, MO.

LOUIS BOEHMER. ALFRED UNGER.

Extract of Wholesale Catalogue 1893-'94.

L. BOEHMER & CO.,

4, 5 & 28 Bluff, Yokohama, Japan.

	Per 1000
Lilium Auratum, 5 to 7 inches in circumference	$ 15.00 silver
" " 7 to 9 " "	18 00 "
" " 9 to 11 " "	30.00 "
" " 11 to 13 " "	50.00 "
" " rubro vittatum, 6 to 7 inches	250.00 "
" " " " 7 to 9 inches	275.00 "
" " macranthum (magnificent large flower) 7 to 9 inches	50.00 "
" " " 9 to 12 inches	120.00 "
" Longiflorum eximium, 4 to 6 inches	15.00 "
" " " 6 to 8 "	20.00 "
" " " 8 to 10 "	30.00 "
Iris Kæmpferi, strong clumps, best selected, 100 varieties	75.00 "
Nerine Japonica, the pink Japanese Spider Lily	30.00 "
Pæonia Arborea, 100 best varieties, double and half double	300.00 "
" Herbacea, new varieties	250.00 "
" " common varieties	150.00 "

Season begins in August. **Send orders early therefore. PRICES ARE FREE ON BOARD IN YOKOHAMA.** 100 gold dollars are about $145.00 silver. **Freight** to all United States points per Northern Pacific Railroad Co., 1½ cents gold per pound to San Francisco. $8 to $10 gold per ton, 40 cubic feet measurement.

PAYMENT. Orders sent direct to us must be accompanied by a remittance (bankers draft or other usual credit) to the full value. If freight is to be prepaid the remittance should cover that cost also. Our bankers are the Hong Kong and Shanghai Banking Corporation. Agencies: San Francisco and New York. Please write for Catalogues. We are the oldest and only European firm in the country, established 1882. The most of Japanese novelties were introduced by us.

CYCAS REVOLUTA, the true long leaved variety, stems from 6 inches to 4 feet, are collected by Mr. A. Unger every year. 1000 pounds, fronds and roots cut off, $50.00 silver. Please send your orders before November.

CABLE ADDRESS: **BOEHMER, YOKOHAMA.**

SMITH & WEBSTER,

MAKERS OF

GREENHOUSE PIPE

FOR HOT WATER AND STEAM,

193 Lake Street, - CHICAGO, ILL.

ESTABLISHED 1866.

FLORISTS WIRE DESIGNS

MANUFACTURED BY

N. STEFFENS

335 EAST 21ST ST. NEW YORK.

IF YOU WANT A GOOD STAKE THAT WILL NOT ROT, HARBOR INSECTS, ALMOST INVISIBLE, LAST YEARS, TRY OUR PATENT GALVANIZED WIRE SCREW PLANT STAKE.

Address **WM. STOPHER,** Vassar College, POUGHKEEPSIE, N. Y.

STOTT'S DISTRIBUTOR

Read Advertisement in next week's issue.

THE GREAT **ANTIPEST.**

For particulars, see next week.
R. W. CARMAN, GEN'L AGT.,
291 Amity Street, FLUSHING, Queens Co., N. Y.

Kills Mildew and Fungus Growth. What does?

GRAPE DUST.

Sold by Seedsmen.

Mention the American Florist when writing to advertisers on this page.

Indianapolis.

The June meeting of the Indianapolis Florist's Club was held last Wednesday evening with a good attendance.

The most important business before the meeting was the report of the committee on G. A. R. flower beds. It reported not to accept the proposition of the citizen's executive committee, but instead to lay out free of charge the words "Welcome G. A. R." in the state house grounds. The Secretary of the State Society called attention to the fact that the state society would meet on July 3rd. A committee of three was appointed to provide entertainment for visiting members.

A communication was received from the Chicago Florists' Club in regard to co-operation for the cut flower displays to be made for World's Fair. It was decided to lay the matter before the State Society for discussion and action.

Decoration Day trade was reported to have been excellent. Some good sized cut flower orders were given and the plant trade was very good. Spring trade in general was reported very good, that is as long as it lasted. The season was short. Geraniums and small foliage plants are cleaned out. W. B.

FLORISTS visiting the World's Fair should not fail to enter their names, date of arrival and hotel at which they are stopping in the register of the Chicago Florist Club, at the headquarters, 45 Lake street. And by consulting this register you can learn what members of the craft are in the city at the time and where to find them. We anticipate that this register will prove to be a great convenience to visitors.

GLASS

which is absolutely perfect for modern greenhouse construction.

ROCK BOTTOM PRICES.

Send for Estimate. Satisfaction Guaranteed

REED GLASS CO.

65 WARREN STREET and 46, 48, & 50 COLLEGE PLACE,

—NEW YORK CITY.—

IMPROVED GLAZING.

Zinc Joints for putting glass without laps. No leakage. No sliding of glass. Practically air tight. Keeps out cold winds, thereby saving fuel. No laps, saves enough glass to pay for the zincs. No breakage of glass on account of frost or ice. Some of the largest growers in the country are using "Gasser's Patent Zinc Joints" with entire satisfaction. Write for sample and price list.

J. M. GASSER, FLORIST, 101 Euclid Ave., CLEVELAND, O.

GREENHOUSE HEATING AND VENTILATING.

Superior Hot Water Boilers.

JOHN A. SCOLLAY, 74 & 76 Myrtle Ave., Brooklyn, N.Y.

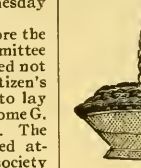
Send for Catalogue.

OUR Sash Lifter AND Hinges

will do the work and cost you less than any other. Send your name and address and we will mail you description and price.

BAY STATE HARDWARE CO. 272 Freeport Street, BOSTON, MASS.

COMMENCEMENT BASKETS.



FOR THE SCHOOL GRADUATE

There is no present so fitting and appropriate in every way as a handle basket filled with choice flowers.

You can convince your customers of this if you only have a good line of suitable baskets on hand to show. In fact our baskets will sell themselves. If you are wise you will place an order at once. Select from our wholesale list which we mail on application, or leave it to our judgement to select you an assortment. Your order will be filled promptly from fresh stock and at bottom prices.

On Wheat Sheaves, Immortelles, Metal Wreaths and all lines of Florists' Supplies we can please you. Send for our reduced price list.

H. BAYERSDORFER & CO.,

WHOLESALE ONLY. 56 N. 4TH ST., PHILADELPHIA, PA.

Cape Flowers, new crop in best white quality at $1.00 the lb.; 10 lb. lots, $9 net.

Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 28-in. upwards, at 40c., 45c., 50c., 60c., 75c. and $1.00 each, according to length.

Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.

Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.

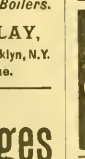
Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc. For prices consult our

Trade Catalogue, mailed free.

August Rolker & Sons, 136 & 138 W. 24th St., P. O. Station E. New York.

MARSCHUETZ & CO., Florists' Supplies, 23 & 25 N. 4th St., PHILADELPHIA, PA. Send for Catalogue.

ERNST KAUFMANN & CO., Florists' Supplies, 113 NORTH 4TH STREET, PHILADELPHIA, PA.



WHITE DOVES FOR FLORISTS.

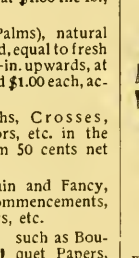
Largest and finest stock in the United States. Write for prices to

S. J. RUSSELL, 850 Montgomery St., Jersey City, N. J.

FLORAL DESIGNS

The Cut Flower Worker's friend. Fine book of 160 pages. Send $3.50 for it, to J. HORACE McFARLAND, Harrisburg, Pa.

The FAIRBANKS GALVANIZED STEEL Wind MILLS AND TOWERS



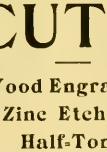
Are WARRANTED to be as well made, of as good material, and to produce more power than any other steel mill made.

THE ECLIPSE WIND MILL the Original Self-regulating Wood Wheel.

Pumps, Tanks, &c. Send for Catalogue and Prices.

Fairbanks, Morse & Co., Chicago, Ill.

CUTS!



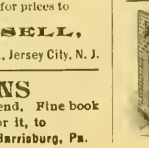
Wood Engraving, Zinc Etching, Half-Tone, Wax Engraving, Photo-Engraving, Designing.

MANZ & CO., 183 Monroe Street, CHICAGO. ENGRAVERS.

THE PERFECT DRAINAGE BENCH TILE

For circulars, etc., address

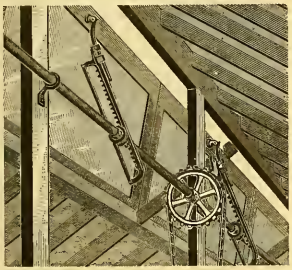
W. P. Wight, Upland Green Houses, Send your business card. MADISON, N. J.



GREEN-HOUSE HEATING. MYERS & CO. 1518 & 1520 S. 9th St., PHILADELPHIA. Send for catalogue and price list.

SEE HERE BROTHER FLORIST!

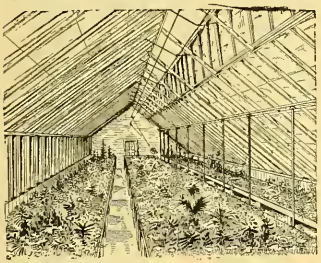
Arn't you tired going through your houses two or three times a day year after year and lifting your ventilating sash one at a time and propping them up with sticks or pots, with a chance of having sash blown off and broken glass to pay for? If you are



We have got just the thing you need, the **Newest and Best** thing out. "The New Departure" for **about half** the cost of the old style. Send for Descriptive Catalogue to

J. D. CARMODY, Evansville, Ind.

THE CHAMPION



Automatic Ventilator.

The cheapest, easiest to operate, and by far the best machine in the market. Don't buy a Ventilator until you have seen my illustrated descriptive circular, which will be sent you free, giving prices, etc. Also **Champion Soil Pulverizer and Sifter.**

Address, **E. E. WOLF,**

Box 114. SPRINGFIELD, O.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

Clear Cypress,

from bottom gutter up is my specialty.

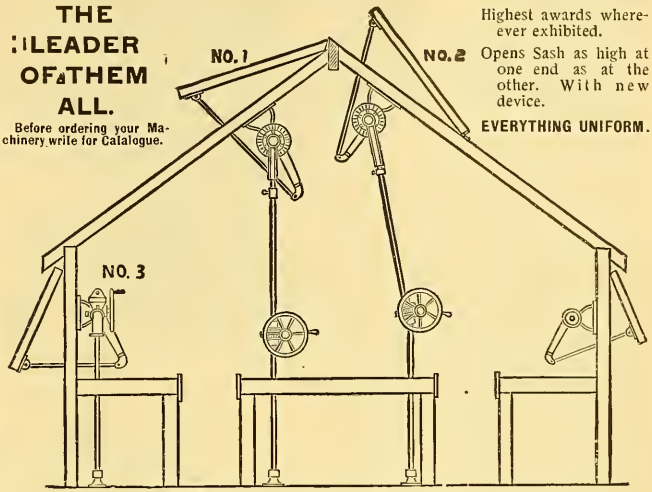
Lyman Felheim,

ERIE, PA.

STANDARD VENTILATING MACHINERY,

THE LEADER OF THEM ALL.

Before ordering your Machinery write for Catalogue.

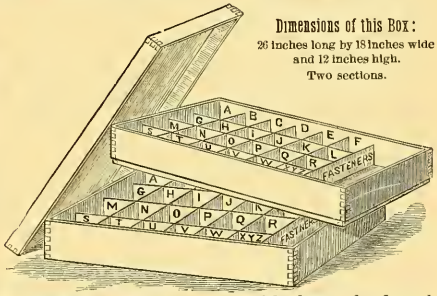


Highest awards wherever exhibited.

Opens Sash as high at one end as at the other. With new device.

EVERYTHING UNIFORM.

E. HIPPARD, YOUNGSTOWN, OHIO.



Dimensions of this Box: 26 inches long by 18 inches wide and 12 inches high. Two sections.

With an order for 500 letters, we furnish a box made of wood nicely stained and varnished, such as is represented in the cut.

BOSTON FLORIST LETTER CO.

Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1½-in. and 2-in. 2.00 per 100. Patent fastener with each letter.

OUR NEW SCRIPT LETTER, $4.00 per 100.

N. F. McCARTHY, Treas. & Mangr. | Address 13 Green St., **Boston, Mass.**

Address all correspondence to 1 Music Hall Place.

We have a new **FASTENER** which we consider a decided success. Any customers having old style fasteners which they wish to exchange, can do so without additional cost by writing us.

AGENTS:

Marschnetz & Co., 25 N. 4th St., Phila., Pa.
A. Kolker & Sons, New York.
F. E. McAllister, 22 Dey St., New York.
A. D. Perry & Co., 33 Warren St., Syracuse, New York.
Ernst Kaufmann & Co., 113 N. 4th St., Phila.
H. Bayersdorfer & Co., Philadelphia, Pa.
A. C. Kendal. 115 Ontario St., Cleveland, O.
J. A. Simmers, Toronto, Ont. Agent for Canada.
E. H. Hunt, 79 Lake St., Chicago, Ill.
Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.
H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O.
T. W. Wood & Sons, 6th and Marshall Sts. Richmond, Va.
Jas. Vick's Sons, Rochester, N. Y.
C. A. Kuehn. 1122 Pine St., St. Louis, Mo.
D. B. Long, Buffalo, New York.

These Letters are handled by all the Wholesalers in Boston.

J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS •

Greenhouse Material,

LOUISVILLE, KY.

Mention American Florist.

STANDARD HOSE MENDER.

The only Mender using ordinary galvanized wire No. 14, instead of expensive bands. Any person can handle it with perfect ease. Thousands in use and all testify to its Wonderful Merits.

Sample Box, by Mail, 50 cts.

E. HIPPARD, Youngstown, Ohio.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

The Professor's Black Calla.

A writer in the daily press regales his readers with a beautiful fairy tale of how a local professor obtained the bulb of this "rare calla" while travelling in the Holy Land. After giving a crude reproduction of an engraving that has been in most of the catalogues, but which is said to be "Sketched by an *Examiner* artist from the plant of Professor Durham," he concludes:

Professor Durham had a dangerous time securing this lily, and became nearly embroiled in a fight with some natives over it. This particular lily was noticed by the professor as he was traveling between the town of Hebron and what is known as Solomon's Pools. The lily was growing just off of the road and the professor, desiring to secure a good bulb, left the party to dig it up, expecting to get it before they could drive very far. The carriage drove around a little hill and the professor set to work to extract the bulb carefully from the ground.

He had almost succeeded in this when he looked up and there stood an old Arab with the heavy club that is carried by all, both as a means of offense and defense. The old man watched the operation a moment, and then proceeded to levy blackmail on the professor.

The professor's party had disappeared around the hill and the old man held the professor while he was joined by two younger Arabs, each with a heavy club. Professor Durham decided that he was willing to pay a little for peace and took out his purse to settle what damages they might claim, if they were in reason. While he knew the reverence in which the black lily was held, he also knew that the average Arab would sell his mother for a modest sum. The Arabs, however, were inclined to be speculative and they wanted all there was in sight. The professor was about to hand a small coin to the old man when one of the younger ones made a lunge for both the purse and the money. He got the latter and the professor determined to end the negotiations. He hurled the bulb, over which all the trouble arose, full in the face of the old man and started on a run after his party, shouting for them to wait.

Suddenly something struck the professor full in the back, and turning he found that the calla bulb had been thrown back at him. The Arabs had been nonplused at the sudden blow from the bulb and the action of the professor, and in their anger they could think of nothing to do but to hurl the bulb back again. It was badly broken, but the professor gathered up the fragments and kept on. His party soon noticed him, waited until he caught up, and now the lily is growing in his Irvington garden despite its rough usage.

The California gentlemen who sends in the clipping adds sarcastically: "That they are *rare* here is certainly true, and they will be *rarer* soon. They have been banished from a dozen gardens here during the past two seasons, the people being unable to bear their stench when in bloom."

DO YOU WANT a list of the leading cemetery superintendents? You will find such a list in our new trade directory and reference book.

EVANS' IMPROVED
CHALLENGE VENTILATING APPARATUS
Write for Illustrated Catalogue.
QUAKER CITY MACHINE WORKS, Richmond, Ind.

FLORISTS' HOSE,
Made by E. W. Holt, member of the Society of American Florists.
Goodyear Rubber Store,
2 W. 14TH ST. NEW YORK.

Lawn Vases.
THE LARGEST IN THE MARKET FOR THE MONEY.
15x29-inch ....price $1.00.
15x34-inch, with base, price $1.75.
20x22 inch .....price $1.50.
20x22-inch, with base, price $2.25.
Send for our price list of Standard Flower Pots, Plain and Fancy Vases, etc., etc. Terms cash f. o. b.
HILFINGER BROS. POTTERY, Ft. Edward, N. Y.

Mention American Florist.

THE "LOCKLAND" Sash Bars
ARE ALWAYS SATISFACTORY.
This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.
GUTTER MATERIAL, RIDGES, SASH, ETC.
The finest CLEAR CYPRESS used.
Write for circulars and estimates.
LOCKLAND LUMBER CO.
Lockland, O.

"Standard" Flower Pots.
As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address
The Whilldin Pottery Company,
BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.
Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.
A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.
We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.
SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY
Manufacturing the
ELVERSON, SHERWOOD & BARKER
STANDARD FLOWER POTS.
Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bud Pots, etc.
ADDRESS PITTSBURGH CLAY MF'G CO., New Brighton, Pa.

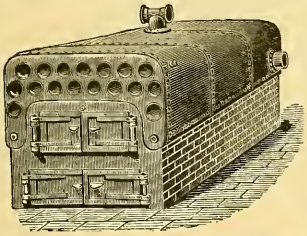
H. M. HOOKER COMPANY,
57 and 59 W. Randolph Street, CHICAGO,
NATURAL GAS MADE GLASS
FOR GREENHOUSES.
Write for latest prices.

ESTABLISHED 1854.

DEVINE'S BOILER WORKS.

THE FLAT TOP TYPE

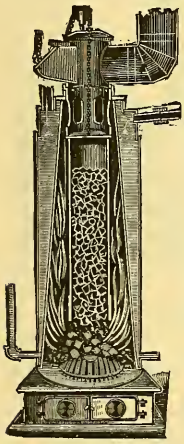
Wrought Iron Hot Water Boilers



Capacity from 350 to 10,000 feet of four-inch pipe.
SEND FOR NEW LIST.

FRANK DAN BLISH, Att'y,

OFFICE, 189 STATE STREET.
WORKS, 56th & WALLACE STREETS.
CHICAGO.



THE WILKS HEATER,

FOR HEATING

GREENHOUSES, STORES, DWELLINGS, ETC.

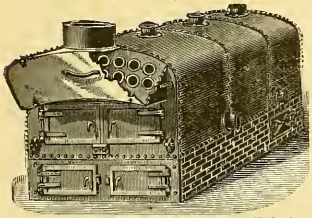
Manufactured by THE S. WILKS MF'G CO. 123 S. Clinton St., CHICAGO, ILL.

SEND FOR CATALOGUE.

KROESCHELL BROS.
IMPROVED

Greenhouse ×× Boiler,

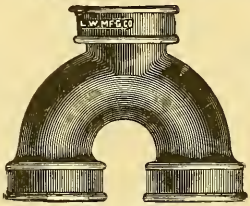
41 to 55 Erie St., CHICAGO.



Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around front, sides and back). Write for information.
Mention American Florist.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.
JOHN G. ESLER, Sec'y F. H. A., Saddle River, N. J.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

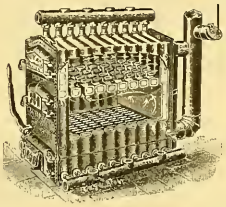
Pipe can be easily put together by any one, very little instruction being needed.

GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.
Mention American Florist.

L. WOLFF MFG. CO., 93 to 117 W. Lake Street, CHICAGO.

WRITE FOR ILLUSTRATED CIRCULAR.



Royal Heaters.

—:o:—

HOT-WATER, STEAM.

The past winter was hard on Boilers. Have you examined your old one, you may need another. . . . . .

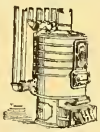
Write us.

HART & GROUSE,

UTICA, N. Y.

Gurney

HOT WATER HEATERS and RADIATORS FOR HEATING Dwellings, Public Buildings, Etc. BY HOT WATER CIRCULATION

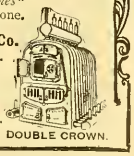


GURNEY.

The apex of success in house heating is reached by the Gurney Heaters. Their excellent work during the past severe winter is but another tribute to their superiority. Our book "*How Best to Heat Our Homes*" sent free to anyone.

Gurney Hot Water Heater Co.
163 Franklin St., Boston, Mass.
59 Wabash Ave., Chicago, Ill.

SELLING AGENCIES:
Johnson & Co., 71 John St., New York.
J. C. F. Trachsel, 246 Arch St. Philadelphia.



DOUBLE CROWN.

FRENCH GLASS

For CONSERVATORIES, ROSE HOUSES, Etc. Etc.

VANHORNE, GRIFFEN & CO.,

Importers of PLATE and WINDOW GLASS. Manufacturers of BENT GLASS and FRENCH MIRRORS.

131-133-135-137 FRANKLIN STREET, NEW YORK.

Note—Imported Glass is used in the best grade of Greenhouse building.

GOODYEAR RUBBER CO.

ALL KINDS RUBBER GOODS.

We make a SPECIALTY in GARDEN HOSE, in both Rubber and Cotton.
A GREAT VARIETY OF HOSE REELS, SPRAY PIPES, SPRINKLERS, ETC.
141 Lake Street, CHICAGO.

Index to Advertisers.

Abel C C & Co....1182 1183
Adv. Rates, etc.....1180
American Boiler Co...1192
Anchorage Rose Co. ..1179
Baller F A. 1186
Barnard W W & Co...1183
Bay State Hdw Co....1188
Bayersdorfer H & Co..1186
Boehmer L & Co 1187
Bonsall Jos E & Son ..
..... 1180 1184
Boston Letter Co 1189
Brackenridge & Co....1185
Brauer & Richter.....1186
Brown R S & Son.....1187
Brown & Canfield.....1179
Burns & Raynor.....1181
Burrow J G..... 1186
Burton John..... ... 1179
Carman R W.....1187
Carmody J D..... 1189
Chandlee Geo F 1179
Chitty H E.....1185
Coles W W 1185
Cook John..... ...1179
Corbrey T J 1180 1181
De Lamater Iron Wks1187
Devine's Boiler Wks..1191
Dreer H A..... ... 1184
Eidering J W.....1182
Elliott W H.....1180
Ellison Wm.....1181
Fairbanks Morse & Co1188
Felheim Lyman.....1189
Field S B.....1184
Floral Exchange The.1185
Forstermann I. 1186
Gasser J M 1188
Gonzalez & Co.....1185
Goodyear Rubber Co .1191
Goodyear Rubber
Store 1190
Gurney Heater Co....1191
Hall Ass'n.....1191
Hammond Benj.....1187
Hancock Geo 1185
Hart James.....1181
Hart Michael A 1181
Hart & Crouse.....1194
Hartford H E.....1180
Henshaw Samuel.....1186
Herendeen Mfg Co....1192
Herr Albert M.....1185
Hews A H & Co.....1190
Hilfinger Bros.....1190
Hill E G & Co.....1185
Hippard E 188
Hitchings & Co.....1192
Holmedale Green-
houses 1179
Hooker H M Co.....1190
Horan Edw C.....1181
Hulsebosch Bros.....1183
Hunt E H..... 1181
Hunt M A.....1179
Hunter & Purdy.....1181
Kaufmann Ernst & Co1188
Kemble Floral Co ...1179
Kennicott Bros.....1181
Koffman E 1189
Kroeschell Bros .... .1191
Kuehn C A.....1181
La Roche & Stahl.....1190
Ley John H.....1186
Lockland Lumber Co..1190
Lombard R T.....1185
Long Dan'l B.....1181
Loosdale Edwin.....
.....1179 1183 1184 1185
Lord & Burnham Co..1192
McCarthy N F & Co...1181
McFarland J H.....1188
McFarland J H Co....1179
McGowan John.....1185
Maitre R 1187
Mann R & Son.....1182
Manz J & Co.....1188
Marschuetz & Co.....1188
May John N.....1186
Michel Plant & Bulb
Co 1182
Millang Bros..... 1181
Moffatt G J.....1183
Moninger Jno C 1192
Moore Frank L.....1179
Morat Edward.....1179
Myers & Co.....1188
National Plant Co 1180
Niles Centre Floral Co1181
North F W.....1179
Olson M.....1181
Ouwerkerk P.....1185
Peck & Sutherland....1181
Pennock C J..... 1185
Pennock Sam'l S 1180
Pierson F R Co. 1182
Pittsburg Clay Mfg Co1190
Prince A & G Co.....1181
Quaker City Mach Co.1190
Randall A L. 1181
Reck John 1185
Reed Glass Co 1188
Reimschoelder Ernst.1182
Reiss & Brady.....1183
Renard Joseph.....1185
Rimbaud Benj.....1183
Roberts D H.....1186
Roehrs Theo.....1181
Roemer Fred..... ... 1185
Rogers Nurseries.....1186
Rolker A & Sons.....1188
Russell S J.....1188
Sander & Co.....1185
Schneider Fred. 1186
Schulz Jacob.....1179
Scollay John A ..... .1188
Segers Bros.....1183
Shelmire W R.....1185
Sheridan W F.....1181
Siebrecht & Wadley...1185
Simons R E.....1184
Sptlz. Doppfel & Co...1190
Situations. wants.....1184
Smith C A Floral Co..1179
Smith Nathan & Son..
.....1185 1186
Smith W L 1184
Smith & Webster.....1187
Stark Bros.....1182
Steffens N.....1187
Stopher Wm 1187
Stott Garden Imp Co..1187
Struck J N & Bro.....1189
Styer J J..... 1185
Sunderbruch H L.....1181
Tessmer Julius & Co...1180
Tesson R F.....1179
Tricker Wm..... .1185
Ulbricht F J.....1184
Vander Schoot R &
Son 1183
Van Horne Griffen &
Co 1191
Van Tubergen C G Jr.1183
Van Waveren &
Kruyff.....1183
Vaughan J C.... 1179 1186
Wabash R R 1187
Walker Bros 1182
Weeber & Don.....1183
Welch Bros.....1181
Whilldin Pot Co.....1190
Wight W P..... 1188
Wilks S Mfg Co.....1191
Williams H W & Son..1184
Winter N D.....1184
Wisconsin Flower Ex.1180
Wolf E E 1189
Wolff J Mfg Co.....1191
Wood Bros.....1186

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

CYPRESS GREEN HOUSE MATERIAL

CLEAR

CYPRESS

BARS

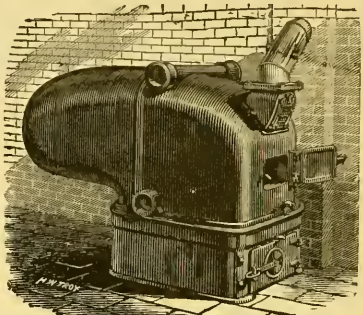
HOT BED AND VENTILATING SASH

JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

GreenHH
Mass Agri Col 15

GREENHOUSE HEATING AND VENTILATING

Horticultural Architecture and Building.



HITCHINGS & CO.

Established 1844.

233 Mercer St., New York.

FIVE PATTERNS OF BOILERS.

NINTEEN SIZES.

Perfect Sash Raising Apparatus.

Rosehouses, Greenhouses, Etc, of Iron Frame Construction, Erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frame Benches with the "Perfect Drainage Bench Tile" or Slate Top.

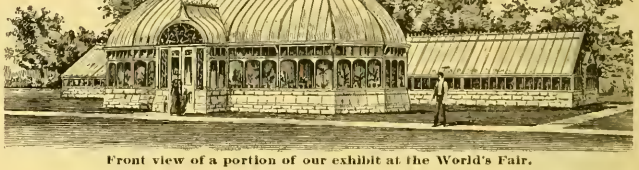
SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUE.

LORD & BURNHAM CO.

Horticultural Architects and Builders,

STEAM AND HOT WATER HEATING ENGINEERS.

☞ Plans and estimates furnished on application. . . . . .



Front view of a portion of our exhibit at the World's Fair.

. . . SEND FOUR CENTS POSTAGE FOR ILLUSTRATED CATALOGUE. . . .

LORD & BURNHAM CO., Irvington-on-Hudson, N. Y.

STEAM · AND · HOT · WATER · HEATERS

FOR

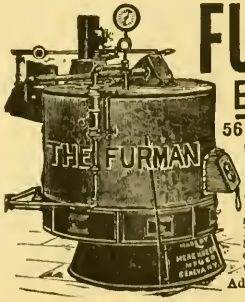
GREENHOUSE HEATING.

156

DIFFERENT SIZES.

American Boiler Company.

BOSTON, 195 Ft. Hill Square. NEW YORK, 94 Center St. CHICAGO, 34-36 Dearborn St. DENVER, Mining Exchange Bldg. SAN FRANCISCO, 80 Crocker Bldg.



FURMAN BOILERS

Economical — Substantial — Safe.

56 STYLES AND SIZES—BURNS HARD OR SOFT COAL.

Modern Hot-Water Heating

These Boilers have a high reputation for Staunchness, Durability and Safety, and are GREAT COAL SAVERS. Minimum Friction and Maximum Velocity only obtained by VERTICAL WATER CIRCULATION. Send for new 150-page book giving full particulars and a great deal of valuable information on modern Heating and Ventilation, with plans and tables for correct hot-water work. Mailed free.

Address HERENDEEN MFG. CO., 26 Vine Street, GENEVA, N. Y.

THE AMERICAN FLORIST

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, JUNE 22, 1893.** **No. 264**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company. Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.
322 Dearborn Street, Chicago.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,

P. O. Drawer 164, CHICAGO.

Eastern Office: 67 Bromfield St., Boston.

CONTENTS.

The World's Fair 1193
Pansies at the World's Fair 1194
The peristyle World's Fair (illus) 1195
Advertising exhibitions 1195
Orchids—Our telephone 1196
As it appears through four eyes 1196
After the hail storm (with illus) 1197
Miscellaneous seasonable hints 1197
Carnations—Seasonable hints 1198
Philadelphia 1198
Boston 1198
Chicago 1199
New York 1199
Buffalo 1199
St. Louis 1199
Low prices in Cleveland 1199
Our annual convention number 1202
The seed trade 1204
Portsmouth, N. H. 1206
Toronto 1206
Foreign notes 1208
Denver 1208
Cincinnati 1210

Society of American Florists.

The distance between St. Louis and Chicago, as well as other considerations, render it impossible to take advantage of the customary concession on excursion tickets on the certificate plan as granted by the various passenger committees if delegates propose to visit both cities.

It is presumed that most of those in attendance at St. Louis will desire to go to Chicago at the close of the convention. The only way to secure reduced rates for such a trip is by direct consultation with the local representatives of the various railroads. There is already a very general tendency to cut rates to and from the World's Fair and the best plan will be for the Florists' Clubs or local members of the S. A. F. to appoint committees to attend to this at once. An effort will be made to run a special train through from New York and Philadelphia and the undersigned will thank members located on any of the routes between New York and St. Louis if they will communicate with him, so that the route may be so arranged as to accommodate the greatest number. State number expected to attend from point in question, preferences as to route, etc. The convention meets one week earlier than usual this year, so immediate action is imperative.

WM. J. STEWART, Secretary.

The World's Fair.

At the present time the Wooded Island is in its full glory, and is the special attraction to most horticultural visitors. It lies surrounded by the lagoons, clothed in foliage to the water's edge, and presenting the most charming picture of an informal garden one could wish to see.

Passing over the bridge at the south end the first landing is on Hunter's Island, a little slip of land planted with willows, snowballs and bush honeysuckles, a few iberises giving a touch of white here and there through the shrubs. At one side is the bark hut of an Australian settler, at the other an American log cabin. From this a bridge takes us to the larger island, and here more ambitious planting begins. Along the margin, where the natural planting is in force, the earliest shrubs are now past, but the mock orange is just coming into bloom, and abundance of color is supplied by herbaceous plants. Talk of forget-me-nots; we see stingy little patches of this charming flower in some gardens, and think its effectiveness is much over-rated; here are masses two yards long and a yard wide, a sea of blue, which tempt us to abjure, for the time being, every other blue flower we know. It is so charming, but then it is in just the proper form, a big mass of bloom with a backing of shrubbery. Close here is the exhibit of Fred W. Kelsey, New York, comprising some good standard hollies, yews, retinosporas, etc.; these have been planted quite recently. The same exhibitor makes a very fine display of rhododendrons in an adjacent tent, consisting of nearly one hundred varieties. The majority of them are now past their best, though Michael Waterer, a superb glowing flower, almost scarlet, is still in fine condition; Fleur de Marie, light center, suffused with glowing cerise at the edge (almost the coloring of a Cusin rose), and Lady Hillingdon, a delicate mauve, still attract attention. The unprotected rhododendrons outside are entirely done.

Near the rhododendron tent is the Anthony Waterer exhibit. The seedling azaleas, which were such a remarkable feature two or three weeks ago, are now out of bloom, but Mr. Waterer has some conifers here that will well repay careful examination. Speaking from the standpoint of the general public—and it is the approval of the general public that casts the final ballot, in a business point of view—this is the most attractive group of conifers on the island. Each plant is a specimen, and of an interesting class. Perhaps the most noticeable plants in the group are two or three specimens of Abies pungens, the Colorado blue spruce. They are not blue; they are covered with an indescribable silvery tinge, looking like a blue green leaf covered with hoar-frost, the most perfect coloring the writer has ever seen on this tree. We know there is a good deal of uncertainty about this spruce; the color varies a good deal and the perfect hoar-frost effect is not by any means common, so take good heed of these charming specimens. Near by is a good Abies Nordmanniana, while a new color value is given by the golden Irish yews. Indeed, the yellow tinge is repeated, for we find a golden Japanese juniper and golden Lawson's cypress near by, very effective against a dignified dark green Irish yew. This is not a large group of conifers, but it is one that will amply repay close examination.

The adjacent bed of kalmias from John Waterer is now in full bloom, a mass of blush-tinted bloom, backed by shining foliage. The noble standard rhododendrons contributed by John Waterer are now gone; we have reason to feel grateful to these foreign exhibitors, who have certainly done much for the landscape effect, both on the island and around the buildings.

Continuing in a northerly direction, we shall note some pyramidal box and a bed of aucubas of merit, planted by W. Van Kleeff & Son, of Boskoop, Holland; they also show hydrangeas, which are not yet in bloom. Along the borders we find the forget-me-nots still repeated, while here and there is the gorgeous flame color of herbaceous poppies, wonderfully effective on the edge of the shrubbery. The herbaceous plants are now in their full glory, and there is much to admire, but those glorious poppies and the masses of heavenly blue along the shrubs remain the strongest impression received there—even a purely practical trade paper may be forgiven for slipping on the edge of poetry when dealing with them. But there is something else, by the way, which should be named with these other effective flowers, another herbaceous revelation, and that is a big bed of Canterbury bells. They form the margin to a bed of shrubs, planted for competition, these flowers alone being the work of the department. They are superb, tall columns clustered with bells like huge gloxinias, purple, blue, lilac, white and rosy pink. The purple cup-and-saucer flowers are especially showy, but indeed it would be difficult to pick out any one sort that was not; just a batch of campanulas, mixed varieties, and yet, at time of writing, it is the showiest and most striking bit on the island. The seed was sown last July, transplanted into flats, and wintered out of doors, only receiving enough protection to keep the water off, then planted in their present situation in April. A large proportion of the people who see them are totally unacquainted with the plant, and much wondering admiration is expressed; indeed it is a revelation in hardy bedding to many of us.

The pæonia display attracts our attention a little farther on; these flowers will

be at their best this week. Some singles or semi-doubles were first to open, and they were not without a distinct value in the landscape, though their attractions are fleeting compared with the double sorts. Some of the dark reds are very attractive in bedding, but for cutting we notice that the market demands the lighter colors, pink, white or cream, and their salability also depends to some extent on their shape. Where the flower consists of a mass of short irregular petals, giving a rough crumpled effect, they are not nearly so valuable for cutting as the large globular flowers, approaching in shape a Paul Neyron rose. Among pæonias noted on the island Beaute de Villecante was an admirable light rose pink, a large globular flower, with long stems and good foliage; it seemed quite fragrant too. Rosamond was another very good pink; Louis d'Ostres was an excellent old rose, with a very fine shape. An exquisitely delicate blush was Naomi; the flower was of extra size and fine shape, and suggested itself as first-class for market cutting. Among whites the best noted was Sulphurea, a creamy tinted flower of admirable shape. These pæonias are not, as yet, labelled with the names of the exhibitors.

In the vicinity of the pæonias are several herbaceous displays, representing Pitcher & Manda, the Boskoop Nurseries and others. The German and Iberian irises are now at their best; the latter, though hardly as showy as the German, are very charming in their rich blue. The columbines planted along the borders are now nearly over, but a mixed bed from the Boskoop Nurseries is in full glory, white, red, yellow, blue and maroon. The pyrethrums, too, are very showy, the variety being large. But a display even more attractive than these is made by old fashioned pinks (Dianthus plumarius); there is one bed of the pure white form filling the air with spicy sweetness all around, and both white and pink are used to great advantage on the border of the shrubbery. There are sweet Williams too (Dianthus barbatus), brilliant in pink and crimson, self-colored and in rings of differing tint, there are foxgloves, white and purple, and little creeping lamb's toe making a carpet of yellow. The chief thought brought to mind by this herbaceous bedding is that some of the most gorgeous bedding we could use is found among these old favorites, which we have cast aside for geraniums and coleus. Not that we want to do without geraniums and coleus, but we want the herbaceous plants too.

The rose garden in the center, which is to be a most charming feature, must be left untouched on in the present article; it demands special attention, and in another week will be in full show. As the north end of the island is reached the planting is chiefly confined to the borders, where the glowing poppies continue to show among the shrubs. Inside the Japanese temple one can see a mass of chrysanthemums and big bushes of double-flowering peach and camellia, the latter a very handsome bush covered with red flowers and buds. The last named plant is enough to deceive the very elect, but these beautiful plants are certainly the work of the ingenious artificer of Japan.

In addition to the shrubs on the island some very good effects are produced around the Woman's Building, where plants contributed by French exhibitors have been used. At the north end of the building Moser, of Versailles, and Croux & Son, of Val d' Aunay, had superb rhododendrons, which still retain enough flowers to be very attractive. Moser's plants are superb; one huge specimen of Caractacus, a rich purplish red, which was flowered under the dome of the Horticultural Building, was worthy of a most prominent position. Croux & Son showed some good euonymus, conifers and kalmias. At the south end of the Woman's Building some nice groups of shrubs are shown by Honore Defresne et fils, Vitry. Among them are some variegated euonymus of excellent merit, Aucuba Japonica limbata, golden box and variegated hollies. The grouping about this building is an excellent landscape feature.

A word more about the rhododendrons. Looking at the effects obtained by their use in the landscape we are especially indebted to three exhibitors, Anthony Waterer, John Waterer and J. J. Moser. Moser and John Waterer contributed the largest specimens, but the Anthony Waterer collection showed the longest list of hardy varieties, and the display made at the end of the Manufactures Building was superb. The Belgian plants, contributed by the Ghent Horticultural School, A. Dallaire, C. Vuylsteke and Desmet Bros. were good; so were the Dutch plants from the Boskoop Nursery Association, W. Van Kleeff & Sons and Blaauw & Sons, but they were mostly small plants. T. J. Seidel, of Dresden, made a special display of new varieties; unfortunately the plants were small, but there was among them a white, Helene Schiffner, which promises to be a valuable plant. The rhododendrons planted out all winter seem to have done but poorly, and their blooming is of little account, but this is not strange, considering the unprecedented rigor of the past winter. The Dutch exhibitors made excellent use of different forms of R. Catawbiense, which were beautiful enough to make one proud of this native plant. These large specimens from the foreign growers were old plants, a number of them having passed the half century mark; needless to say that they are valuable plants. They have helped to form the most remarkable show of rhododendrons ever seen in this country, and one of which the Columbian Exposition has a right to be proud.

The big basin for aquatics that has been built in the lawn directly in front of the main entrance to the Horticultural Building is now complete. This basin is 80x92 feet and is devoted to the display of aquatics by Wm. Tricker, Dongan Hills, S. I., N. Y. The plants are now in position and comprise about 40 varieties of nymphæas and 4 varieties of nelumbiums. The nymphæas include all the Zanzibarensis varieties, also gigantea, gracilis and all the odorata, pygmæa and Marliacea varieties. Among the night blooming varieties are N. Devoniensis and some seedlings of same, dentata, rubra Sturtevantii and some of Mr. Tricker's seedlings. His display of Victoria regia and Euryale ferox are in a tank in the show conservatory erected by Lord & Burnham Co. The exhibit is in charge of Mr. Chas. R. Cook and it will certainly be a very attractive and interesting display.

Around the basin mentioned there have recently been planted seven huge cacti from Arizona, each from 16 to 18 feet tall.

Preparations for planting the big beds of cannas are now going forward. The big bed in front of the north wing of the Horticultural Building will be planted by New York. It will contain a total of 5,000 plants, of which 3,000 have been sent by F. R. Pierson Co. and the majority of the remainder by James Dean.

The corresponding bed in front of the south wing will be planted by Pennsylvania, the bulk of the plants coming from Messrs. H. A. Dreer and Robert Craig.

Flanking Mr. Tricker's aquatic display are two smaller spaces in which are being planted J. C. Vaughan's display of cannas. These will contain 700 plants, including some 80 varieties. He will show a large number of his new canna Florence Vaughan.

Pansies at the World's Fair.

The pansy display is now at its very best; and will, no doubt, soon lose some of its attractiveness from the continuation of excessively warm weather. The great beds in front of the Horticultural Building (diagrams of which have already appeared in the FLORIST) are daily admired by thousands, and will hold their place until the heat renders it advisable to replace them by subtropical plants.

These pansies, which represent the best strains of growers in England, France, and Germany, as well as in this country, were sown in the open ground July 12-18, last year. The locality chosen was one of the inner courts of the Horticultural Building, so, although in the open ground, they would be at least partially shaded at some times during the day. They received their first transplanting when about five weeks old, being given more room, for the purpose of encouraging a more stocky growth. They were finally planted out in the autumn, and were all wintered outside.

Two methods of protecting the plants during winter were followed. Some of them were simply covered with littery manure, while others were protected by temporary frames, consisting of boards set up on edge, with sash across the top. A little litter was scattered on the sash.

It is hard to say whether either system showed advantages over the other; a few losses occurred in both cases, but it seems justifiable to say that the covering with litter was fully as satisfactory as the use of the frame.

Owing to the rigorous season the pansies were very late in coming into bloom, and it is to be feared that the flowering season will not be very greatly prolonged, owing to the heat, and comparative exposure of the bed.

It is impossible, at the present time, to give any opinion of the merit of the different strains; one thing, however, may be observed—that it is very rare to find any of the fancy varieties without quite a number of "rogues" among them, which have sported back to the commoner forms. The best show, really, is made by some of the strong self colors. Gold Else makes a fine show among pure yellows, though hardly as strong as an unnamed yellow with black eye, which is manifestly a very fine bedder. Snow Queen is a very good pure white, though a little flimsy in texture. King of the Blacks was the best very dark variety noted. What is described as "ash gray"—a faint milky blue, appears to be a good bedder—it is a mass of flowers, but the color is hardly decided enough to attract the majority. The azure blue was another good bedding sort.

For velvety depth of color in rich maroon, red-brown, and golden-brown, nothing could excel the auricula-flowered sorts. Still more glowing, and nearer a real deep red is the Victoria strain, while the warmest tint of all is reached in the velvety claret color of Meteor. But the most remarkable fancy sort seen was Peacock, the colors of maroon, blue,

THE PERISTYLE, WORLD'S FAIR.

white, and velvety black, being arranged like the eye of a peacock feather.

Lord Beaconsfield is a little disappointing, for so many of the blooms seemed to come untrue to the characteristic markings. Its distinguishing traits are two white upper petals, and a white blotch near the edge of each of the three lower petals, which are blue. Some very attractive striped flowers are seen, those having purple stripes on lilac ground being charming, while others have brown stripes on a bronzy yellow ground. The self-colored fawns seem a little weak as bedders, but there are some charming flowers in warm Havana brown shades, both self and blotched.

Looking at these beds in a thoroughly impartial manner leaves one to judge that for general trade sales the fancy strains would not be desirable, as it would be impossible to keep them true. One might keep true to colors, perhaps, but not to markings, and with the loss of characteristic markings the chief distinction of a special named sort is lost also.

The gardener having direct charge of these pansies is Mr. Melchior Luetschg, a Swiss, who is a pansy enthusiast and who takes the greatest interest in his pets.

The Peristyle at the World's Fair.

The accompanying engraving gives an excellent view of the peristyle at the east end of the south basin. The huge gilded statue of liberty is seen at the right. The size of the latter can be judged by noting the comparative size of the men seen at work on the base of the figure. The peristyle is a beautiful work of art, the figures that ornament it standing out in bold relief against the background of blue sky, while through the columns may be seen the waters of the lake. When illuminated at night some beautiful effects are seen here. The roof is panelled and an incandescent light glows in the center of each panel. Looking from one end to the other between the massive columns the effect is wonderfully beautiful.

Advertising Exhibitions.

I see in your issue of June 8, under the heading of "Some Flower Show Statistics," Mr. G. C. Watson thinks we have a wrinkle here in the shape of advertising and would like to know how we turned out in '92. It is for the purpose of answering that question and also to tell all interested the alterations and improvements we are carrying out for the coming show that I write you now.

In 1891 our first chrysanthemum show was held in the Grand Music Hall of the Exposition Building, and as the admission to the exposition while open was only 25 cents, it was decided to keep the admission at that popular price, the general opinion being that parties used to paying that amount for entrance would either stay away or kick at a higher charge. It was also thought that many parties interested in flowers and plants would come several times at the lower price, so as to be able to see the different classes every day as they were exhibited.

The committee having the show in charge were very conservative, and while recognizing the fact that advertising paid, they did not propose to pay for all mention of the show. A week or so before the opening a letter was mailed to all the papers, telling of the show to be given, and dwelling strongly on the educational features it presented, stating what was being done elsewhere and how interested the public were in really good exhibitions. Several passes were placed in each letter and courtesy and attention promised the representatives of the press at any time they might make themselves known while visiting the show. This encouraged several of the leading papers the Sunday preceding the opening to print two and three column articles on the "Queen of Autumn," stating what was being done for her advancement in St. Louis, and also giving sketches of some of the peculiar varieties; the history of the plant was also looked up and reference made to the large shows of England. The papers did not forget to use their passes, and as a result the representatives were taken in charge and shown everything of interest in the hall and some things that were not present, the result being that the principal points were made public the following morning as matter of news and not as advertising. The awards were published in like manner from day to day as fast as made known.

There was a great interest taken by all members of the club, and the talk and personal solicitation of members in regard to attendance went a long way towards success. From the above it can be seen that considerable advertising was received that was never meant to be advertising and consequently was never paid for. In addition to the above there must also be mentioned, first, a good show, and secondly, music, there having been organ recitals every evening, which were much enjoyed by all.

In 1892 the show was worked upon the same lines as far as advertising was concerned; music was omitted, however, owing to the large organ being out of tune and the expense of having it put to rights being too much for the club to stand. A feature was added, however, on Tuesday night in the shape of political bulletins which were furnished free of charge by one of the daily papers, the

only expense being some small charge for having them focused upon a large screen. The night was exceedingly unpleasant and quite a number paid entrance fee for the sake of seeing the returns who otherwise would have remained in the open air.

The show remained open four days. The attendance was larger than the year before, but not in proportion to the increased time it was open. This was directly due to the prevailing rainy cold weather. Had it not been for the increased attendance the first night, owing to the returns, the attendance would have remained at about that of 1891, including the additional day.

A mistake was made also in the printing of the tickets, they being received only two days before the opening, whereas they should have been in the hands of club members two weeks before the opening to have given them time to push their sale. It was noticed that the music was missed; parties after walking around once or twice would leave the hall instead of remaining seated and being interested, as had been done the year before. The show, as a whole, was not as good as the preceding one, a mistake having been made in the separating of the foliage and flowering plants. The groups of palms and specimens were staged in the corridors surrounding the hall, and the chrysanthemums by themselves looked flat—that is, there was nothing to break the sameness. So, taking all things into consideration, we may say that '92 was as good a season as '91, the amount spent in advertising bringing in the same percentage of returns, other things being equal.

In 1893, when the show was decided upon, the exhibition committee thought they could improve upon the plans followed the preceding year, and have worked in several new features. In the first place it was found that the evening visitors were composed principally of society people, as it were, and it was thought a 50 cent admission would keep very few of them away, not enough by any means to make up for the increased admission fees. During the afternoons the show was visited by what might be termed a poorer class and also by many ladies who stopped by either going to or coming from shopping, and it was thought best to keep the entrance at that time the same figure as last year, so that it now stands, in the afternoon 25 cents and in the evening 50 cents.

Music was also decided upon and in view of the increased admission during the evening it was decided to have it at that time. This plan has not been fully worked out as yet. Seventy-five dollars, however, has been appropriated by the committee to cover that item, and if the Exposition Association bears one-half the expense of the music, as it did two years ago, it will enable us to have something worth listening to, the opinion being that if there is to be any music it must be good.

Another scheme has been worked up for indirectly advertising the show; this is the offering of two tickets, one to the boy and girl standing highest in their studies for a specified time in each room after the opening of the public schools in September. This has as yet to be approved by the proper officials, but will undoubtedly go through. It will take several hundred tickets, but the investment is looked upon as a good thing, inasmuch as the announcement at the school and the awarding of tickets will carry news of the show to most of the homes in the city.

Hoping our experience may be of value to others has led me to give the inside experience of our club in advertising the show. ROBERT F. TESSON.

Our Telephone.

"Hello, Parker House, is Mr. F. Sander of London stopping there?"

"Yes sir, he arrived this morning. Do you wish to talk to him?"

"If you please. Hello, is that Mr. Sander?"

"Yes, why, that sounds like the AMERICAN FLORIST, am I right? Well, I am glad to hear from you. I have come over to see your great World's Fair. I have three wonderful new plants I shall show there."

"Did you have a pleasant trip?"

"Yes, and I cannot tell you of my astonishment and delight when I arrived at the quay in New York, to see a beautiful basket of orchids brought aboard as a greeting for my wife. I only mention this now to show the progress orchids are making in America. Five years ago when I visited you I did not see a single orchid in a New York flower shop. On the very evening of my arrival this time I saw a half dozen shops at least where orchids, both plants and flowers, were to be seen."

"Then do you think that orchids have a great future as commercial flowers in this country?"

"Perfectly sure of it. The demand doubles itself every year for cut flower purposes, although orchids have never been pushed. In fact there are not enough imported to make it possible to drive them very much. I feel perfectly sure that very soon you will see much higher figures paid for orchid flowers in New York, especially cattleyas.

"The orchid is the real elite of the flower kingdom. The rose comes next. First of all the orchid is very quaint and extraordinary in form and shape; then you have in them all the colors of the rainbow; many are very sweet scented and above all there is no flower of such lasting quality as the orchid. If you don't want to cut it to-day you can cut it to-morrow or a month hence. That is not so with other flowers; the rose must be cut at once. Orchids are often kept a month in water. There are some exceptions but with nearly all this is true. Take for instance Cymbidium Lowianum. I have known it to last on the plant for three months, and cut for eight weeks.

"The love for orchids has simply grown with education and wealth, and so it will grow from year to year, and as the supply of orchids gets less so prices will advance from year to year."

"Then you believe that the time is coming when these plants will become scarce?"

"I am quite sure of it. Every ounce of silver taken out of a mine must make one ounce of silver less, and every orchid out of the woods one less, and as they are slow growing and the competition is now very great in importing, the only pity is that soon the supply will not be big enough. Seedling growing is now beginning, but they can never be produced to the extent needed. I am quite sure that what I say is true and you will find as the years roll on that I'm right. Our own orchid trade in England has grown with but little advertising and without a catalogue. We have never printed a catalogue."

"You are aware, we presume, that there is a widespread belief here that orchids are difficult to grow?"

"Yes, I know it, but the culture of orchids should be studied and you will soon find orchids grow just as easy as geraniums. You cannot grow an erica in a dracæna house, or an alocasia in a croton house, or a cold plant in a hothouse. Orchids want to be studied, and with houses built to fit them you will then find them easy enough to grow."

"What are the most fashionable varieties in England at the present time?"

"Cattleyas and odontoglossums are always fashionable. Through nearly every orchid there is a trace of magenta and they are very brilliant at night. Trianæs come out great at night, so does Phalænopsis Schilleriana. In England old gold colors in orchids are very much in fashion now, such as Oncidium prætextum, O. Forbesii and O. crispum. We never have enough of them and the rage is spreading all over the world, in France particularly. It is nothing unusual for ten dollars to be paid for a single spike of Oncidium curtum.

"For a succession of bloom take the old Cattleya labiata, which comes in October and November up to Christmas, at Christmas Cattleya Percivalliana, which is followed later on by Trianæ and Mendelli. These are not expensive varieties and the first year they will produce bloom enough to pay for the plants."

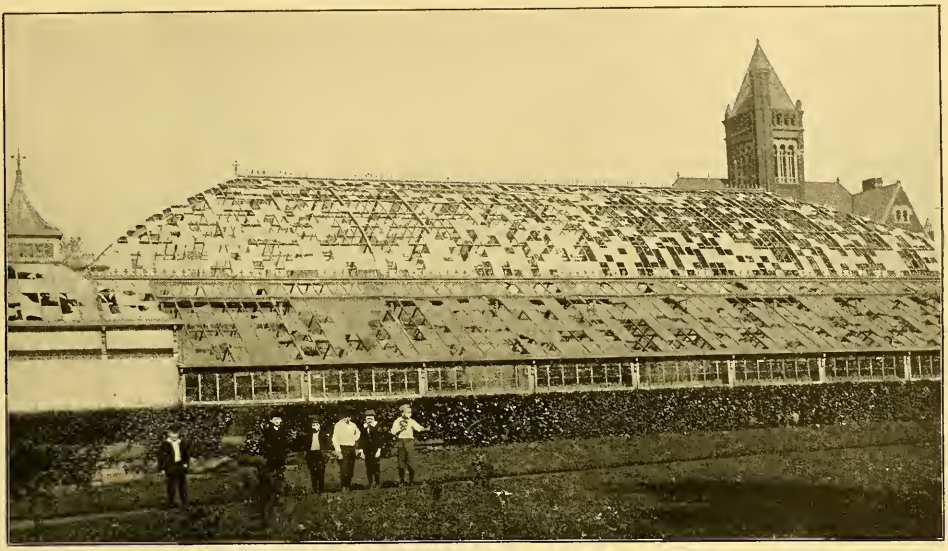
"Why do you not make an exhibit of orchids at Chicago?"

"The distance is too great and it is too expensive. Three thousand miles on water and one thousand more overland through the heat. If one could replace them all right, but if you lose rare and unique plants they are lost forever."

As it Appears Through Four Eyes.

Notwithstanding the steady decrease in wholesale prices of cut flowers and the very general complaint on the part of the growers that no money has been made the past season, yet the usual amount of building seems to be going on. Much of it, however, is rebuilding new and improved houses taking the place of old or faultily constructed ones. There has been a remarkable improvement in commercial greenhouse construction during the past decade. Durability, convenience and light receive much more consideration than they did in the building of ten years or more ago. This is to some extent the result of necessity, for it is next to impossible to make anything out of the old structures at present prices. With roses especially one must now take advantage of every modern improvement if he expects to come out at the end of the year with a profit.

The Dutch bulb men as they have sailed one after another for home claim to have been well satisfied with the orders taken and the results of their trip generally. It is more than likely though, that it is to the general dealers rather than to the growers that they are indebted for whatever success they may have met. That the interest in and demand for forced bulb bloom has declined rapidly and will continue to do so is unquestionable, and the big growers know it. But there is every reason to look for a steadily growing use of hardy bulbs for out door planting. In the garden bed in early spring is where they are best appreciated, and although they lose their hold on the winter cut-



THE ALLEGHENY PARK CONSERVATORY AFTER THE HAIL STORM.

flower market this will not unfavorably affect their charm and popularity in the spring garden. Our Holland friends will do well, however, to go lightly on their reports of short crops, unfavorable seasons, and scarcity of this or that variety, for the American buyer has outgrown the scare period for good.

As the end of the season approaches the vacation question becomes a prominent one and many are computing just how much time and how much money they can spare for recreation and rest. Chicago is uppermost in most minds and many who read this have no doubt already planned to take the trip to St. Louis and Chicago next August. While such an undertaking is not exactly in the line of rest there is no question about the recreation offered, and in addition such a combination of opportunities for mental building up is not likely to ever come again to the present generation. Not the least of the advantages offered will be the opportunity to meet personally and listen to some of the foremost specialists from abroad who are planning to be with us at that time. It will be a rare treat, the convention at St. Louis and the Horticultural Congress at Chicago, and no one who can possibly get there should miss it.

Is the interest in bowling falling off? And if so, what is the cause? The New York Bowling Club has disbanded; reports from other clubs which at this season in past years were actively engaged in practice indicate that meetings are entirely suspended or are attended but lightly. Bowling is a healthy exercise but is rather hard and exhausting work to be a permanent attraction in August. Should it drop out as an incentive to the attendance at the annual gatherings of the Society of American Florists, those individuals who have been holding that the encouragement of bowling contests as a feature of the meetings is unprofitable and detrimental to the Society's interests will have an opportunity to test the soundness of their theory.

A cat is reputed to have nine lives, but a cat cannot compare in this respect with some of the stories which are periodically resurrected and re-resurrected by the daily newapapers. This time it is the Philadelphia *Times* which introduces our old friend the story of the palatableness of the calla root and the farmers in Florida who are preparing to make their bow to the hungry public as large growers of the same. Where is Caldwell?

After the Hail Storm.

We present herewith an engraving from a photograph of the conservatory in the city park, Allegheny City, Pa., taken just after the terrific hail storm that did such great damage to the florists of Pittsburg and vicinity. As this conservatory was glazed with heavy ribbed glass the size of the hail stones and the force with which they struck the glass can be imagined. When Superintendent Hamilton gazed upon this wreck after the storm he is said to have shed tears that rivalled the largest hailstones in size.

The damage to the new conservatories in Schenley Park, Pittsburg, was equally great. It will cost $6,000 to replace the broken glass. But this loss will be borne by the builders, the Lord & Burnham Co., as the buildings had not yet been formally turned over to and accepted by the Park Commissioners.

Miscellaneous Seasonable Hints.

This will be a great time to repair old benches or build new ones. I would have been a good many hundred dollars in pocket if I had begun to build benches ten years ago, as I now build them, and have done for the past two years. Nine out of ten florists use for benches one-inch boards of either pine or hemlock, and if they have not had a very heavy coat of water lime they will last only about three years. It is more of an outlay at first to use heavier material, but it is an enormous saving in ten years. There is not only the saving in the cost of lumber, having to replace the one inch boards at least three times as often as you do the two inch, but think of the labor of tearing out the old bench every three years and putting in new. For a rose or carnation bench plank six inches wide and two inches thick is the about the thing, and leave a space of one-half inch between them. If the bench is for growing potted stuff then put the planks close together. Don't forget the heavy coat of water lime on the new bench; I don't think it is much good to them afterwards. A heavy coat about as thick as it can be spread with a white wash brush will add 100 per cent. to the life of any bench, whether it be one or two inches.

Have you made up your mind whether it is better to plant your roses on benches in three or four inches of soil, or whether it is better to plant them in one foot of soil on the ground. This is not in my province, but yet I am bound to say more than one of us is thinking about it. The great advantage in young roses on a raised bench in a few inches of soil is that they have absolute and perfect drainage and will be a little more precocious, and for one winter's crop most profitable, but it will be hard work and unsatisfactory to grow them the second year. Now the claimant of the solid bench (by that I mean in one foot of soil on the surface of the greenhouse, or planted in the natural soil over which the greenhouse is built) has several arguments in his favor; among them is this, that there is no annual throwing away of the old crop and renewing the soil. The second is there is a longer period of crop; with good management there is really but a short vacation. Thirdly, there is no great quantity of young roses to be raised to succeed the plants to be thrown out, and lastly, there are no benches to be built or patched up. You will see by the above four points that the solid bench man has much the best of it, and can well afford to cut

much fewer roses than the man who grows them as an annual crop in four inches of soil.

The cyclamens you sowed in winter should be now in 3-inch pots, and there is no better place for them now than in a mild hotbed; never mind whether the thermometer stands at 90° in the shade. Pot your cyclamens in 4 or 5-inch pots, with plenty of charcoal for drainage and plenty of old lime rubbish mixed with the soil, and plunge them in a hot bed, place a strip on the rafters of the hotbed back and front, and shade the sash. The glass will be five or six inches above the frame, and will allow a free circulation of air. Cyclamens like a daily syringing, and never let them get very dry; they don't want a deluge like a calla, but they suffer greatly when allowed to get wilting dry.

A plant that is in great demand in the spring is the lemon verbena, and few florists have any stock of it. Keep a few plants over and put them in 4-inch pots; plunge them out of doors and after early frost take them in and further directions will be given you.

It is not a day too late between this and the 10th of July to strike chrysanthemums for single stems in 5 and 6-inch pots. The best advice ever given about rooting chrysanthemums after you have stopped firing was given by our friend Wood of Massachusetts; when he said that late propagating was all right if you kept the cuttings saturated, he said something that benefited many of us. If you can't do that, a gentle hotbed will root them to perfection.

Many of the most beautiful of begonias can be propagated just now, and there is no better time to propagate that most useful of them, B. incarnata grandiflora. The moment your spring sales are over, prepare your smilax bed and plant at once. If planted by the 1st of July, there is no excuse if you don't get at least four or five crops before the following June.

Stevia, although a very common plant (I mean S. serrulata), is an actual necessity with the general florist; the plants now should be in 3 or 4-inch pots. Put them in 6-inch pots and plunge in any material that is convenient, but don't plant them out, because they lift badly.

Buffalo, N. Y. WM. SCOTT.

Seasonable Hints.

It was formerly our practice to build our benches by having the boards run lengthwise of the house. Of late we have adopted the preferable plan now becoming general of laying the boards crosswise (cutting them the width of the bench) and running the horses lengthwise. The horses are placed some eight or ten inches from edge of bench, and are thus entirely out of the way, thus making the alley look wider. Piping is very good for legs and supports, but wood will last as long as the house if the legs are set on stones or bricks. Benches built in this way will last probably twice as long as when full length boards are used, and if a board gives out it is easily replaced. Good hemlock will last longer than poor pine, and the best pine is too expensive. Yellow pine is not suitable for benching- it soon decays. Thick whitewash preserves the benches wonderfully. Cement is better put on with a trowel, and before it sets the cracks of the boards opened out. Never join the bench boards up close, but have about a quarter of an inch space for drainage.

Whether to grow the carnations on raised benches or solid beds is a question often discussed. We have always been averse to the solid bed, although it is possible some varieties may do better than on benches. We have noticed that most of the growers who have used the solid beds come round to the raised benches sooner or later. It is certainly the case that other things being equal, they will not come in bloom so early. They are also much easier to attend to on the benches. The truth is if we were compelled to grow them on the ground we think we would go out of the business. It is contended that the cost of the benching material is saved. But the space under the benches is lost also, which can be put to account in a great many ways, often paying for the benching several times over in one season. We also prefer shallow soil on the benches. Four inches of soil (after it settles) is ample to grow carnations, and much better than six inches or more. The shallow soil dries out quicker, is not so liable to be over-watered, the drainage is better, it fills up quicker with roots, responds more promptly to the application of fertilizers, and the plants grown therein are healthier and less liable to attacks of spider. Raised benches (plants near the glass) and shallow soil has become a maxim in our own practice.

Avondale, Pa. W. R. SHELMIRE.

Philadelphia.

It might be supposed that our friend "Dan," superintendent of Horticultural Hall that was, and now in charge of a pile of ruins, has a somewhat easy time of it this warm weather. This is not the case, however, his usually smiling countenance is overcast and his whole appearance is that of a tired and hard-worked man. When asked the trouble he answered: "I am being literally bored to death; ever since the fire I have had to answer the greatest lot of questions. I did not mind this so much at first, but after a while it grew monotonous, and now it makes me very weary. 'You had a hot time down there the other night.' 'What's the insurance?' 'Will it cover the loss?' 'Why didn't they have more?' 'Are they going to build at once?' 'Going to sell the property?' 'How are the bowling alleys, are they hurt much?' These and a hundred other questions are fired at me over and over again until I am nearly wild. I can hardly sleep at night, I am going off in the country somewhere to recuperate." Poor Dan.

Matters at the Hall are about the same, as the insurance adjusters have done nothing as yet; they have two months in which to settle the loss, and it looks as if they intended to go slow and pay as little as possible.

School commencements furnished what little there was in the way of business, the transient customers seem to have hied themselves away, and matters are almost at a standstill in the city.

With the growers there is considerable activity, summer rose houses have been planted and others are being cleared out and renovated for the Autumn Queen. Early and often is to be the motto of the chrysanthemum growers, as unless all signs fail there will certainly be an immense amount of chrysanthemums in the market next fall. Then they are to be earlier this season than usual, as several lots have been planted for some time and are being handled with this end in view.

Bicycling is on the increase among the boys about town, quite a number of them being good riders. M. Rice is the latest convert and is very enthusiastic over his new Columbia.

Prices of roses, Perles and small teas $2, Wattevilles and Cusins 3, La France 3 to 4, Beauties 15 to 20, outside Jacqs 4; carnations 75 cents to $1; cornflower 1; sweet peas 50 cents a hundred; valley $4. Cold storage valley may now be had of most of the large seedsmen and bulb dealers, and can be brought into flower in a short time with but little loss. Swayne's Ophelia is now the leading pink carnation, it is very fine.

The boys miss the alleys now that things are dull, and something should be done to hurry up the insurance men, so that some conclusion could be arrived at that will be satisfactory to the club and particularly to the bowling element.

K.

Boston.

The rhododendron show has within the past few years grown to be one of the most attractive and popular of the series of annual exhibitions given by the Massachusetts Horticultural Society. No admission fee is charged and the attendance is quite large during the two days' continuance of the show.

This year's exhibition which took place on June 13–14 outstripped all of its predecessors in extent and beauty, both halls being well filled with showy bloom. The endless shades and tints of the rhododendrons and hardy azaleas, the glowing masses of red and scarlet in pæonies and oriental poppies, the brilliant displays of color in the collections of herbaceous flowers and spring blooming shrubs all combined to form a picture of rare beauty.

Rhododendrons were shown in enormous quantities. The principal exhibitors were Francis Brown Hayes, H. H. Hunnewell, John L. Gardner, Jos. Clark, S. J. Trepass and Edwin Sheppard & Sons. The display from Francis Brown Hayes was grand. The trusses were of wonderful size and there were thousands of them. The whole stage and the larger part of the lower hall were occupied by this one collection, to which a gold medal was awarded. On the second day a large contribution of rhododendrons came in from Mr. F. W. Vanderbilt's place at Newport. The time was rather late for a very extensive display of hardy azaleas, but the collection shown by T. C. Thurlow was very fine.

One of the most showy features of the exhibition was the exhibit of spring flowering trees and shrubbery from J. S. Pay, of Wood's Holl, which was awarded a silver medal. It occupied the entire platform in the upper hall. The hawthorns in this collection were the best ever shown here. From N. T. Kidder also came a bright display of flowering shrubs and herbaceous plants. Other exhibitors of herbaceous plants were J. W. Manning, Shady Hill Nursery Co. and Rea Bros. The pyrethrums from Shady Hill Nurseries were fine, and J. W. Manning's seedling Papaver orientale won for him a certificate of merit. The flower of this poppy is of enormous size and brilliant scarlet in color.

Pelargoniums from E. Sheppard & Sons were shown in variety and quality seldom seen nowadays. Pæonies from T.

C. Thurlow and A. H. Fewkes were also good, those from Mr. Fewkes particularly so. German irises were shown in good assortment by Mrs. E. M. Gill and Mrs. A. D. Wood, clematises in variety by Mrs. M. T. Goddard and begonias by E. S. Converse. W. H. Cowing showed thirty-one varieties of aquilegias, hybrids of A. chrysantha, Skinnerii, cœrulea and Olympica, and Fisher Bros. were represented by a vase of grand blooms of canna Mme. Crozy.

Dracæna Sanderiana, exhibited by F. Sander & Co. of London, received a silver medal. This splendid new plant has shown wonderful toughness. The specimen staged here was taken from England to Belgium first, where it received a gold medal, thence across the Atlantic to New York, then Chicago and back to Boston, yet it shows not the least trace of injury.

Thos. W. Weathered's Sons have secured the contract for the erection of the conservatory attached to the new Memorial Chapel, which has been donated to the cemetery at Salem, Mass., by Mr. Dickson. The conservatory will be 62x37, with iron frame work.

Cut flower trade is rather dull and prices low. "Three Jacqs for five cents" is the cry of the street fakir just now, and this gives a fair idea of the state of the trade in general.

The rose and strawberry exhibition will be held on Thursday and Friday, June 22-23.

Chicago.

On the 14th inst. the title to the greenhouse establishment of the Forest Glen Floral Co. (M. E. Page) passed to Messrs. D. Wood Brant and Louis M. Noe. Mr. Noe is the well known rose grower of Madison, N. J., and Mr. Brant is his brother-in-law. The large area of glass will be put in first class condition, the houses repiped and rebenched, and the place devoted to the production of high grade cut flowers for the Chicago market. The business will be conducted under the firm name of Brant & Noe. Mr. Brant will remain here, but Mr. Noe will return east.

Owing to the small number of responses, the banquet to be given by the Florists' Club this week is postponed, though the regular meeting will be held as usual. It is probable that the monthly suppers will be omitted during the warm weather.

The flower market continues quiet, and there is a large stock of flowers. Prices are very fluctuating. Roses are growing poorer, many being badly mildewed. Good roses bring fair prices, and it is likely they will begin to grow scarce, as growers are beginning to replant. Beauties continue fairly good, being untouched by mildew, so the price does not decline, and they are now the only large roses in the market. Carnations are still very plentiful, and affect the prices of other stuff. Good feverfew is coming in, it sells but poorly, owing to the stock of carnations. Sweet peas are now plentiful, and ox-eye daisies come in by the bushel. A great many white pond lilies are seen, but the commission men do not care to handle them. Pæonies are now plentiful, and vary greatly in quality and price. The finest variety noted this week was Pascalis, creamy white, with one red splash in the middle. A point to be observed was the way these flowers were packed. They were bunched in dozens (thirteen to the dozen, and every flower of best quality) the flowers cut before expanded, and each bunch wrapped closely in parchment paper. This costs more than tissue, but it is air tight, and the flowers are kept in perfect condition. These flowers were being sold for $1 a dozen, when other pæonies brought 35 cents. This grower only sends in first quality pæonies, unless the market is short; if seconds are sent in they are bunched separately, and specified as such. It pays.

The trade is enlivened a little by occasional World's Fair banquets, but other business is dull.

New York.

The cut flower market has gone to pieces, and the end of the season is here without a doubt. As far as roses are concerned it is not a question of price, but simply take anything you can get. At the same time if one wanted fifty first class roses of any kind it would be next to impossible to find them. Indoor roses are about as miserable as they can be, while outdoor roses are as bad if not worse. The dry hot weather has completely spoiled them. Eight hundred Jacqs for a dollar is about the way they go. Long stemmed Beauties, if selected, bring twenty cents as an outside figure.

Carnations are in the same box as the roses so far as sales are concerned, but as to quality they are all right. Lizzie McGowan comes in very handsome, but even this usually desirable variety is gladly exchanged for a dollar or two per thousand. Lily of the valley, notwithstanding the many weddings, does well if it brings over fifteen dollars a thousand. The steamer days make a light demand and school graduations furnish a few customers, but this has little or no effect on the big supply of stock coming in.

Julius Roehrs and family sailed for Hamburg on June 15. It is said that Messrs. Bergmann, Meissner and Kretschmar are also to start soon. Wm. Elliott is booked to sail for England on July 1.

The floral exhibits at the Queens County Agricultural Fair, which opened on June 14 at Mineola, were quite extensive and were credited with being a main attraction of the show.

Fritz Dressel, of Bonn & Dressel, Weehawken, was married on June 7.

Jas. B. Kidd, from Sherwood Hall Nursery Co., California, is in town.

Buffalo.

There has been more activity in the store trade this past week than has been the case for some time. Several fashionable weddings helped to stir things up, greatly to the benefit of most of us. The roses that are coming into town, as well as those home grown, have a very tired look at present, particularly Mermets. Perles of course are in their glory now. Roses don't bring half, and perhaps only a third, of the price they do in the winter months, but there are far more of them sold here in May and June, and yet they are difficult to procure. More attention should be given to the summer crops of roses, for certainly the grower can cut four times as many buds in June as he can in January. We are having perfect summer weather and have so far escaped our annual hail storm, but as last year's came on the 12th of July, we are not yet out of the woods. A severe hail storm visited the village of Lancaster, Erie county, on Friday last, but out of compassion to W. J. Palmer, whose large establishment is there, the hail did not assume the proverbial hen's egg size, but stopped at small hickory nut size, and Mr. Palmer got out with nothing worse than a bad scare.

Webb Bros. of Corfu are picking prodigious crops of fine carnations. Their carnations have been fine all winter, and now they seem to have taken a new lease of life. Their plants of Hinze's, Silver Spray and Harrison are a sight to behold.

There was a good attendance at the last meeting of the Florist Club, and after the routine business was disposed of there was a lively discussion over the depredations that have taken place among the flower beds this spring; especially the tulip beds have suffered. This is a serious matter with the plant men, for it discourages people from spending money on plants for their lawns. A good committee was appointed to take steps to do all in their power to suppress this meanest of stealing.

Our president, Mr. Dan'l B. Long, is off again for Chicago, partly pleasure and the rest business. Mr. Kelway of Kelway & Son, Langport, England, was in town this week. If a man has time to talk herbaceous plant lore, what a feast he can have with Mr. K. It will take him an hour to get through pæonies alone.

There is gentle whispering that Mr. V. Hammond, our esteemed friend of the beautiful Niagara, is to take a partner for life this summer, and will become a fixture in Buffalo. This is good news, for all of us want him here. W. S.

St. Louis.

The past week has been marked by nothing special in the trade. The week opened with surplus stock all round, but towards the end the supply let up and things balanced themselves nicely. The entertainment committee having in charge the welfare of the visitors in August held their first meeting during the week, and from the plans discussed show that they expect to make a raid on the funds the subscription committee has been actively collecting during the past month.

The bowling club met Tuesday evening and finally decided to make the meeting night Wednesday as originally proposed. The record of the club was broken and Mr. Sanders has placed on record a score of 238 for members to bowl at. A score of 250 was made during a practice game, but can not be counted in the averages. The club were pleased to have Mr. Ringier, of Chicago, as a guest during the last meeting and gave him a chance to make a very creditable score, which he did. R. F. T.

Low Prices in Cleveland.

ED. AM. FLORIST:—As a subscriber and careful reader of your valuable journal I have read with some little interest and great amusement the letters of "A. H. G." and "G. M. J." and your fair comments thereon.

Why does not "G. M. J." explain that his 120,000 feet of glass is the outcome of over twenty years of high prices charged to the Cleveland public. A young and discerning generation has arisen since "A. H. G." and "G. M. J." commenced business, who require florists as well as merchants to march with the times and have for their mottoes "good goods, small profits and quick returns." Upon these principles I commenced business, am determined to carry out same to the letter, and am grateful to the discerning citizens of Cleveland for their kind appreciation of my system as evidenced by the excellent patronage I have received during the past three years.

It is true I buy all I sell, but I buy for cash and sell for cash, and have the choice of the best growths in the country by so doing, which I venture to say is better than relying on the growth from one

house, even with 120,000 feet of glass to back it; and the best evidence that my system is the only true commercial one is the admission of "G. M. J." that after upwards of twenty years experience "we feel obliged to come down to his level." Let him do so, the citizens of Cleveland will reap the benefit and the hospitals of Cleveland will ever receive attention from Yours truly,

CHAS. ERHARDT.

[If Mr. Erhardt feels that he can make a fair profit the year round by his method, and continue to do so after all the other florists in his city have reduced prices to his rates, very well. We have never advocated exorbitant prices, neither do we believe in excessively low prices. Flowers are peculiar merchandise and methods of handling them can not justly be compared with those of marketing any other goods. They are not only very perishable, but the flower buying class is not unlimited. Mr. E. seems to have reaped a benefit from low prices. People have bought of him because they could buy the same stock cheaper from him than from others. But how will it be when all his competitors make equally low rates? His temporary advantage will have disappeared and he will have cut down the revenue of every florist in his city without deriving any permanent benefit himself. Of course we are supposing that his rates have been much lower than those of other florists—that they have been 40 or 50% lower. If this is not so then our argument loses strength. Certain it is there is a limit below which prices may not be cut without permanent injury to the trade, except of course for poor quality stock, which will rarely be accepted by the people who are the real support of the trade. While some of our readers may hold that they began growing or dealing in flowers because of their love for them, we feel it is safe to assume that the great majority are conducting their business for the dollars there are in it. And the question is simply: How may we reap the greatest financial returns? How may we secure the most dollars with the least outlay? If the *net* returns are greater with low prices than with high rates then low prices are best. But if lower rates do not bring the net returns up to or above those where higher rates are charged then the low prices are a mistake. And the figures for a whole year will be necessary to tell the story truthfully. What one method may gain for you one month it may lose for you the next as supply fluctuates. It is a problem that deserves far more thought than has been given it. But we can never get to the root of the matter until we have first solved the problem of cost of production. If we knew just when we began to sell flowers for less than it cost to produce them the question would be much simplified. As it is we have only the dimmest idea of "where we are at."—ED.]

Catalogues Received.

H. H. Berger & Co., San Francisco, Japanese bulbs, plants, etc.; Wood Bros., Fishkill, N. Y., plants; J. M. Thorburn & Co., New York, trade list seeds; James Veitch & Sons, Chelsea, Eng., plants.

Hybrid Perpetual Roses,

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.

Price Lists to applicants. Address

WILLIAM H. SPOONER,
JAMAICA PLAIN, (Boston), MASS.

SHELBY, MICH.—The annual meeting of the Michigan State Horticultural Society opened here June 14.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—By a single gardener. Good references. Address O F, care Am. Florist.

SITUATION WANTED—Position as foreman; first-class rose grower and propagator of florist stock of the first quality. Can make up decorations, etc. E F G, care American Florist, Chicago.

SITUATION WANTED—By a practical rose grower as a working foreman; 14 years' experience among forcing roses. Married, sober and reliable. Satisfaction guaranteed or no pay expected. Address A F G, 1137 & 1139 Liberty Ave., Pittsburg, Pa.

SITUATION WANTED—By first-class gardener in private place; over 24 years practical experience abroad; well up in the cultivation of plants, fruits, etc., under glass and outdoor gardening. Best of reference from present employer. Married. Address J D, care Dr. Alfred E. Baker, West Chester, Pa.

SITUATION WANTED—Gardener of executive ability and experience in the management and propagation of all commercial requisites connected with floriculture—ornamental, the nurseries, etc.—wishes situation accordingly. Best of references. Address A Z, care American Florist, Chicago.

WANTED TO RENT—Five or six greenhouses near Chicago. X, care American Florist, Chicago.

WANTED—Man who has experience in greenhouse work. State wages expected, including board. O. R. DEMMLER, Eau Claire, Wis.

WANTED—For commercial place, first-class man on roses and carnations. Address C. S. FOOTE, P. O. Box 582, Downers Grove, Ill.

WANTED—A capable man to take charge of a department; married, with no children. Good wages. ANCHORAGE ROSE CO., Anchorage, Ky.

WANTED—Three men for general greenhouse work. must be experienced and sober. Wages $15.00 to $18.00 a month and board. Apply to BRANT & NOE, Forest Glen, Ill.

WANTED—Single man of energy and ability for roses and cut flower stock. Address with terms and experience. J. T. WILLIAMSON, Prop. La Rose Gardens, Memphis, Tenn.

WANTED—An assistant florist, good all round man. Address giving age, experience, reference and salary expected with board. F. W. WRAMPELMEIER, Louisville, Ky.

WANTED—A single man; must be a good grower of roses and carnations. Sober, and must have good recommendations. Address JOY, care T. F. Keenan, Florists Exchange, 45 Lake Street, Chicago.

WANTED—Married man who is a good rose grower, as working foreman in a commercial place. To a reliable man a permanent situation and good wages. Address, with copy of reference from last employer, P. O. Box 230, Madison, N. J.

FOR SALE—2,500 feet 4-inch pipes and fittings. Half price. Address MRS. GEO. WALDBAUER, Saginaw, Mich.

FOR SALE—Hitchings saddle boiler No. 3; heats 450 feet 4-inch pipe; used two seasons. Price $30. Address W. H. SALTER, box 57, Rochester, N. Y.

FOR SALE OR RENT—A valuable florist establishment near railroad depot, containing about 15,000 feet of glass. Apply JACOB MENDEL, Nyack, N. Y.

FOR SALE CHEAP—Second hand No. 1 Exeter boiler, 18 sections, 25 horse power, as good as new; steam gauge, water gauge all complete. Price $30. This is half the price of new. Address J. G. BURROW, Fishkill, N. Y.

SPLENDID OPPORTUNITY—To let on lease for eight or ten years, a large property for greenhouses in most desirable locality; extra good home market; church near by, street cars running past premises, and within twenty minutes' ride of public buildings. Address J. W. Moore, St. Vincents' Seminary, Germantown, Philadelphia, Pa.

WANTED.

Working gardener and florist, and for care of private place; must be a first-class, practical, experienced man in hothouse work, raising roses, carnations, etc., and good vegetable gardener; necessary help furnished. To an industrious, temperate, capable party a permanent place; married man preferred; house furnished. Undoubted references required. Address with full particulars as to age, nativity, experience, wages desired, SHREWSBURY, box 370, Red Bank, N. J.

FOR SALE.

The well known commercial establishment of W. L. Smith, Aurora, Illinois. Plant consists of fifteen greenhouses, one, two or six acres of land. Houses all in good repair and splendidly stocked. Immediate possession. Address

W. L. SMITH, Aurora, Ill.

FOR SALE.

Will sell, to best cash offer received before July 1st, the following:

1 Weathered boiler No. 5, 900 feet 4-inch pipe, 800 feet 1-inch pipe, 2,500 square feet of glass 10x12 single, 30 hotbed sash 3x6.

S. B. FIELD, Roselle, N. J.

FOR SALE.

We offer our greenhouses and label business for sale, including the land on which the greenhouses stand. For information, inquire at the office of

H. W. WILLIAMS & SONS,
BATAVIA, ILL.

FOR SALE.

The Oldest Seed and Florists' Stand in New Orleans

on account of retiring from store business, a large selected stock and good patronage from the best class of customers in the city. Address

R. E. SIMONS,
NEW ORLEANS, LA.

FOR SALE OR TO RENT.

The following greenhouse property, situated on the outskirts of Springfield, the City of Houses; or will sell Greenhouses, Stock and Fixtures and give ten years' lease of 2 acres land. Ten houses in all—5 houses, 10 feet wide, 65 feet long; 4 houses, 18 feet wide, 65 feet long; 1 house, 18 feet wide, 65 feet long. Steam plant! New double Florida Boiler. Stock in good condition, with a large and extra good home market. This is an opportunity in a life-time, as present owner has other interests to look after. If you are looking for a chance, apply at once to

N. D. WINTER,
5 Elm Street, SPRINGFIELD, MASS.

65,000 ROSES SOLD

In Two Weeks, through our ad in the American Florist.

We respectfully call the attention of buyers to the fact that we now have left only the following varieties, all of which are thoroughly first-class stock.

SAMPLES FREE ON APPLICATION.

Perles, Mermets, White La France, Papa Gontier, Wabans, Souperts, Pierre Guillot, Maurice Rouvier, Souv. de Clairveaux, Eva Stahrembergh, Souv. d'un Ami, Prof. Genivat, 2½-inch pots, $40.00 per 1000; $4.50 per 100.

Bride, Hoste, La France, Albany, 2½-inch pots, $45.00 per 1000; $5.00 per 100.

Meteor, 2½-inch pots, $6.00 per 100. Niphetos, James Wilson, 2½-inch pots, $3.00 per 100. Beauties, 2½-inch pots, $8.00 per 100.

Watteville, Bride, Hoste, in 3-inch pots, $8.00 per 100; $75.00 per 1000. Beauties, Meteors, in 3-inch pots, $10.00 per 100. Souperts, Cusins, in 3-inch pots, $7.00 per 100.

H. P. ROSES.

We have a few thousand of the leading varieties of H. P's., such as GEN. JACQ., MAGNA CHARTA, LA REINE, VICTOR VERDIER, ETC. These are all strong plants in 2½-inch pots.

We will close these out at $5.00 per 100; $45.00 per 1000.

O. P. BASSETT, Hinsdale, Ill., says: I had placed my order for roses before receiving samples. If I had not done so, would have taken what you had.

RIVERSIDE FLORAL CO., Marshalltown, Iowa, says: Plants received to-day in splendid order, and are far better than samples. Thanks for promptness and the splendid stock sent us.

The above are samples of the testimonials we are receiving daily.

L. L. MAY & CO., St. Paul, Minn.

BRIDESMAID.

Fine 3-inch plants at $9.00 per 100. Planters need have no fear of this rose sharing the fate of Waban, as it has proved itself a first-class rose. Some of the larger growers are planting it freely.

M. A. HUNT, Terre Haute, Ind.

Some nice

WATTEVILLE

and

BRIDESMAID

plants left.

Please write, stating how many you want, and I will quote you a bargain.

FRANK L. MOORE,

. . . CHATHAM, NEW JERSEY.

The Grand New Forcing Rose,

"American Belle."

Prices and full particulars on application.

John Burton, Chestnut Hill, Philadelphia

ROSES.

Finest stock in Northwest

Duchess of Albany, La France, Catherine Mermet, Waban, The Bride, Mme. Hoste, Niphetos, Perle, Sunset, W. F. Bennett.

C. A. SMITH FLORAL CO.,

77 7th Street, South, MINNEAPOLIS, MINN.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST. . . . . .

ANCHORAGE ROSE CO., Anchorage, Ky.

ROSES.

BRIDES, MERMETS, PERLES, LA FRANCE, ALBANYS.

Clean stock from 3-inch pots at $7.00 per 100.

ROBERT F. TESSON,

West Forest Park, ST. LOUIS, MO.

Send for a Copy OF OUR

TRADE DIRECTORY

AND REFERENCE BOOK.

PRICE $2.00.

AMERICAN FLORIST CO.,

P. O. Drawer 164. CHICAGO, ILL.

SMILAX.

1000 nice bushy plants, from 2-inch pots, ready now. $2.00 per 100. Cash with order.

L. D. CHANDLER, Springville, Erie Co., N. Y.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

ROSES FOR FORCING.

Fine Healthy Stock.

	2½-inch.	3-inch.
AMERICAN BEAUTY	$ 8 00	$11 00
METEOR, extra fine	6 00	9 00
PERLE DES JARDINS	5 00	8 00
SUNSET	5 00	8 00
BRIDE and MERMET	4 50	7 00
NIPHETOS	4 50	7 00
MME. HOSTE	4 50	7 00

5 per cent. off for cash. Orders booked for later delivery.

BROWN & CANFIELD,

SPRINGFIELD, ILL.

HEADQUARTERS FOR

G. SOUPERT

Finest stock ever sent out.

2 -inch	per 100	$ 4.00
2½-inch	"	5.00
3 -inch	"	7.50
3¼-inch	"	10 00
4 -inch	"	12.00

OTHER FORCING ROSES.

Import Bulb List ready. **J. G. VAUGHAN,** CHICAGO.

The New White Rose

KAISERIN AUGUSTA VICTORIA.

From 3-inch pots, $25.00 per 100.

JOHN COOK,

318 N. Charles St., BALTIMORE, MD.

Mention American Florist.

ROSES.

THAS. . . . . $30.00 per 1000

HYBRIDS. . . . . 40.00 per 1000

Healthy plants, in 2-inch pots.

Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.

Trade list on application.

Jacob Schulz,

LOUISVILLE, KY.

ROSES.

PERLES, 2¼ inch, $5.00 per 100.

PERLES, 2¼ inch, $45.00 per 1,000.

JOHN BURTON,

Chestnut Hill, PHILADELPHIA, PA.

ROSES.

Out of 2¼-inch pots. Good forcing stock.

Mermets	$4.60 per 100;		$35.00 per 1000	
Brides	4.00	"	35.00	"
Niphetos	4.00	"		

VIOLETS Marie Louise.

F. W. NORTH, Fostoria, Ohio.

ROSES. Our TRADE DIRECTORY contains the date of introduction and the name of the introducer of all the roses in commerce in America. PRICE, $2.00.

AMERICAN FLORIST CO., CHICAGO.

ROSES

All the leading and popular kinds for winter blooming, in 3-inch and 4-inch pots. . . .

SEND FOR PRICES.

Edwin Lonsdale,

WYNDMOOR, near Chestnut Hill,

PHILADELPHIA.

ROSES for FORCING.

Mermet, Bride, Hoste, Wootton, Mme. Pierre Guillot Roses.

3-inch	$6.00 per 100
2½-inch	4.00 per 100

	Per 100
Marguerite Carnations	$3.00
Early Cosmos	2.50
Achillea Ptarmica fl. pl.	2 00
Double White Feverfew	2.00
Asters in var.	1.00

Will exchange for seeded stock.

HAUSPERGER BROS. & CO.,

826 N. 23rd St., ST. LOUIS, MO.

ROSES.

Fine healthy stock. Per 100 P. 1000

Perles, Mermets, The Bride, Sunset, Papa Gontier, Niphetos, Bon silene, La France, Souv. d'un Ami, Duchess of Albany, Mad. Cusin, Mad. de Watteville	5.00	45.00
Geraniums, double and single, fine assortment of varieties from 2½ inch pots	4.00	35.00
From 3½ inch pots	8.00	

Lots of other Fine Stock.

Send for new list.

WOOD BROTHERS,

Fishkill, N. Y.

ROSES,

STRONG PLANTS,

WRITE FOR PRICES.

Kemble Floral Co.,

OSKALOOSA, IOWA.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

Our Annual Convention Number.

In our Convention Number for 1893, which will also be a Columbian Souvenir as well, we shall repeat the plan of identification by portraits as inaugurated at the Convention in Washington last August. This plan solved the identification problem with such general satisfaction and was so generally made use of that we believe no explanation of its workings is now necessary.

Are you a member of the Society of American Florists? If so, do you expect to be present at the Convention in St. Louis next August? If not now a member do you expect to join while at the St. Louis meeting? If so, and you were not represented among the portraits given in our Convention Number of 1892, please send us a cabinet size photograph of yourself, being careful to write your name and address plainly on back of same. If you have no recent photograph, have one taken now, and send us a copy as soon as ready. If you intend to take your wife with you to the convention (and you ought to do so if possible) send us a copy of her photograph also, as our identification plan includes the ladies too.

This number will contain in addition to the portraits and indexes to same, a complete guide, *at date*, to the Horticultural Department of the World's Columbian Exposition at Chicago, which will certainly be visited by all members of the Convention after the adjournment of the St. Louis meeting. Diagrams of each section of the Horticultural display will be given and the location of each exhibit plainly indicated so it may be quickly located by any one. These will be accompanied by an alphabetical index to exhibitors and a classified list of exhibits, each referring to position on the diagrams; together with fine half tone plates of special features.

Full details regarding the great Horticultural Congress will also be given in this number, and it will be such a "Columbian Souvenir" as you will want to preserve for all time.

THE NEW ROSE "Crimson Rambler" is said to be a beauty. It is a new species from Japan. It is described as a brilliant scarlet, the flowers borne in numerous spikes, as high as two hundred and fifty blooms on a spike, and very hardy. It has created quite a sensation in England.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

CUT SMILAX,

15 cts per string till November 1st. Quality first-class. Special attention to orders by wire.

J. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

ORCHIDS.

I am handling the finest stock of Cut Orchids grown in this country and can supply them in any quantity. Also all other Choice Flowers.

T. J. CORBREY,

Wholesale and Commission Florist,

Consignments Solicited. **45 Lake St., CHICAGO.**

Asparagus Plumosus Nanus.

CUT STRINGS: 6 to 10 feet long, 50 cents each. 12 to 18 feet long, $1.00 each.

In large or small quantities all the year round. The largest stock in the country.

W. H. ELLIOTT, Brighton, Mass.

We are the People!

Who? **KOFFMAN,**

Where? **WALDEN, Orange Co., N. Y.**

What? **SMILAX**

25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.

When? ALL THE YEAR AROUND.

Also Adiantum Cuneatum Fronds At $1.25 per 100.

And he pays the Express.

HARDY CUT FERNS

LAUREL FESTOONING, ETC.

The only place in the world where you can **Always** get them,

H. E. Hartford,

18 Chapman Place, BOSTON, MASS.

DO YOU USE FERNS?

Finest and Cleanest in the Land.

Hardy Dagger Cut $1 per 1000.

G. W. CURREY & CO.

Give us a trial NASHVILLE, TENN.

Mention American Florist.

—OUR—

TRADE DIRECTORY

AND

Reference Book

WITH

SUPPLEMENT for 1893,

bringing the list of names and addresses up to date,

$2 00

AMERICAN FLORIST CO.

P. O. DRAWER 164. CHICAGO.

WHOLESALE FLORISTS

La Roche & Stahl

N. E. CORNER 13th & Chestnut Sts., PHILADELPHIA.

SAMUEL S. PENNOCK,

Wholesale Florist

REMOVED TO REAR OF 42 S. 16th ST., Philadelphia, Pa.

WISCONSIN FLOWER EXCHANGE,

131 Mason St, MILWAUKEE,

WHOLESALE

Cut Flowers AND Florists' Supplies,

BULBS, ETC.

SMILAX.

12 CENTS PER STRING.

First-class, well-seasoned stock.

THE NATIONAL PLANT CO.,

Dayton, Ohio.

JULIUS TESMER & CO.

Manufacturers of all kinds of

Ice Boxes

AND STORE FIXTURES,

937 to 943 N. Western Ave., CHICAGO.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.

	Per 100
Perle, Gontier, Niphetos	$3.00@$4.00
Mermets, La France, Bride	4.00@ 5.00
Meteors	6.00
Carnations, short	1.00
" long	1.50
Valley, Tulips, Narcissus	2.00@ 3.00
Adiantum	1.00
Callas, Harrisii	8.00@12.00
Smilax	16.00@18.00
Paeonias	6.00
Asparagus Plumosus	50.00

In effect till next issue of this paper.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
126 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.; Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange,
45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY,
Wholesale and Commission
FLORIST,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

A. G. PRINCE & CO.,
Wholesale and Commission
FLORISTS,
45 LAKE STREET,
In Chicago Cut Flower Exchange. CHICAGO.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES,
LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

Wholesale Markets.

Cut Flowers.

NEW YORK, June 20.

Roses, Gontier, Perle, Niphetos	1.00@ 2.00
" Mermet, Bride, Hoste	1.00@ 3.00
" Cusin, Watteville, Meteor	1.00@ 2.00
" Bridesmaid, La France	2.00@ 4.00
" Testout	6.00@ 8.00
" Beauty	5.00@20.00
" Outdoor Hybrids	.25@ 1.00
Gladioli	4.00@ 6.00
Carnations	.10@ .50
Valley	1.00@ 3.00
Sweet Peas, per 100 bunches	2.00@ 5.00
Mignonette	1.00@ 2.00
Cattleyas	50.00
Adiantums	1.00
Smilax	10.00@15.00

BOSTON, June 20.

Roses, Niphetos, Gontier	1.00@ 3.00
" Perle, Sunset	2.00@ 3.00
" Bride, Mermet	2.00@ 5.00
" Jacq., Hybrids	1.00@ 4.00
Carnations	.50@ 1.50
Longiflorum	4.00@ 6.00
Lily of the valley	2.00@ 3.00
Gladioli	6.00@ 8.00
Peas	.25@ .50
Spirea	1.00
Stocks	1.00
Adiantum	1.00
Smilax	12.00@15.00
Asparagus plumosus	50.00@100.00
Pink pond lilies	8.00@10.00

PHILADELPHIA, June 20.

Roses, Perle, Gontier, Sunset	2.00
" Niphetos, Guillot, Wootton	3.00
" La France, Bride	3.00@ 4.00
" Beauties	12.00@15.00
Carnations	.75@ 1.00
Sweet peas	.50
Valley	4.00
Smilax	15.00@20.00
Asparagus	50.00@60.00
Adiantum	1.00
Fern leaves	1.00 per M

CHICAGO, June 20.

Roses, Perles, Niphetos Gontier	3.00
" Mermet, La France, Albany	3.00@ 4.00
" Brides, Wootton	3.00@ 4.00
" Beauties	5.00@15.00
" Meteors	5.00
Carnations	1.00@ 1.25
" fancy	2.00
Callas, Harrisii	6.00@ 8.00
Gladiolus	6.00@ 8.00
Sweet Peas	.50@ .75
Paeonies	3.00@ 5.00
Stocks	2.00
Coreopsis	.75
Smilax	16.00@18.00
Adiantum	1.00
Asparagus	50.00

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

WHOLESALE FLORISTS,
JOBBERS IN . . .
. . FLORISTS' SUPPLIES,
FLORISTS' VASES.
METS, BRIDES, GONTIERS, CARNATIONS, ALWAYS ON HAND.
1 Music Hall Place,
BOSTON, MASS.
HORTICULTURAL AUCTIONEERS. . .
Mention American Florist.

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., BOSTON, MASS.
Mention American Florist.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser in these columns.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN
AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY,
Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
The finest Roses, Violets and Carnations
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE
FLORIST,
1122 PINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STEET,
St. Louis, Mo.

The Seed Trade.

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1893. Applications for membership should be addressed to Wm. Megatt, chairman membership committee, Wethersfield Conn.

Philadelphia Seed Notes.

Canary seed is slowly hardening in value in view of light stocks, and the two months or more that will elapse before the new crop is harvested. Holders are not pushing sales.

Rape and mustard seed is also strong and in good demand.

Buckwheat is in good demand and scarcer. The damage done by the severe winter has doubtless induced an increased acreage for this crop to replace.

Sunflower remains normal at a slightly lower rate than held early in the season. Reports from the west indicate a smaller acreage than usual under crop. It is too early to estimate on probable yield; but at present rates and as far as indications point the market is in favor of the buyer.

Reports from Kentucky state that considerable damage has been sustained in the stands of blue grass by the severe winter.

In red clover the May drop continues and of course there is nothing doing in it, the season being over. October quotations are nearing the low figures of the same time last year, which would indicate that no shortage is at present anticipated.

VISITED CHICAGO: Wm. F. Dreer, returning from California, Chas. N. Page, Messrs. Clark and Woodruff, from Milford, Conn., S. Y. Haines, H. A. Johns, Sioux City, Iowa, A. D. Perry, Syracuse, N. Y.

NEW YORK.—All the seed stores in the city close at 1 p. m. on Saturday during June, July and August.

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

Vaughan's Solid Steel Trowel.

THE BEST IN THE WORLD.

NEVER WEARS OUT.

Price, 50c.; by mail, 60c.

VAUGHAN'S SEED STORE,
NEW YORK, 26 Barclay Street. CHICAGO, P. O. Box 688.

Association "Flora"
BOSKOOP, HOLLAND
NURSERIES.
Roses, Clematis, Shrubs, Azaleas, Palms, Herbaceous Plants, Bulbs, Etc.
Catalogue on Application.
P OUWERKERK,
206 Cambridge Ave., JERSEY CITY, N. J.

FORCING BULBS
The Best the Season will Produce.
Send us your list and compare our prices with other reliable offers. We can please the most critical buyer.
W. W. BARNARD & CO.
GROWERS AND IMPORTERS OF BULBS,
6 & 8 North Clark Street, CHICAGO.

Mention the American Florist when writing to advertisers on this page.

SPECIAL NOTICE.

BULBS. BULBS. BULBS.

FALL '93 DELIVERY. SOUND DELIVERY GUARANTEED.

You will run no risk of receiving your goods wholly or partly decayed. You will know to a penny what your goods will cost you, as we give you prices delivered NET to point of destination.

	Per 100	Per 1000
LILIUM AURATUM, 6 to 8 inches circumference	$3.50	$27.50
" " 8 to 9 " "	4.50	35.00
" " 9 to 10 " "	5.50	45.00
" " 10 to 11 " "	6.00	50.00
" " 11 to 13 " "	9.00	75.00

Send for our **New Trade List** which gives you full prices, etc., on all other Lilies, Seeds, Etc. We can ship to you from **Japan direct**, you assuming risks of shipments. Our prices and terms are as favorable as any. Figures are given in **American money**—the reason being, that although 100 gold dollars are at present date on Exchange Draft on Yokohama worth from 130 to 132 silver, fluctuating with the market, the rates may rise any day, changing basis of prices.

Send for our Price List of Bulbs, etc. FROM JAPAN DIRECT.

Freight from Yokohama to San Francisco on fast steamers is $10.00 gold, 40 cubic feet measurement, payable in advance in port of Yokohama. Average cost of freight for 1000 medium sized bulbs from Yokohama to San Francisco $6.00. From San Francisco to eastern points freight goes by weight. If shipped right through, packed in clay, 1000 medium bulbs will weigh (average) 900 pounds. By available lines freight on 100 pounds is $2.50. Custom House entry payable here. Also charges for transfer from steamers to railroad.

FROM JAPAN VIA SUEZ TO NEW YORK DIRECT.

Time of transit 75 to 90 days. Cost of freight 50 to 60 shillings per ton measurement. Fall shipments from Japan arrive New York about middle of December.

NOTE—Shipments from San Francisco on which we pay freight must cover 200 pounds weight; at least 500 bulbs. **Auratums threaten to be scarce.**

SEND EARLY ORDERS.

H. H. BERGER & CO., SAN FRANCISCO, CAL.

GT. VAN WAVEREN & KRUYFF,
GROWERS OF
Hyacinths, Tulips, Crocus, Daffodils,
LILIES, ETC., ETC.
SASSENHEIM, Haarlem, HOLLAND.
ESTABLISHED 1866.

R. VAN DER SCHOOT & SON,
HILLEGOM, - HOLLAND,
Largest Growers of
HYACINTHS, TULIPS, NARCISSUS, SPIRÆA, LILIES OF THE VALLEY, ETC.
HEADQUARTERS FOR HIGH GRADE FORCING BULBS.
Wholesale Importers should write us for Prices.
OUR NEW TRADE LIST NOW READY.

We Sell Bulbs!
Special Prices on Application.
Weeber & Don
Seed Merchants and Growers,
114 Chambers St., NEW YORK.

G. J. MOFFATT,
Manufacturer of
PAPER BAGS AND ENVELOPES
Special attention given to
Seed Bags and Catalogue Envelopes.
NEW HAVEN, CONN

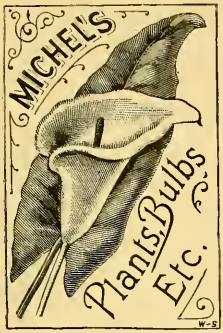
FREESIA BULBS, Refracta alba, strong flowering bulbs $1.00 per 100; $9.00 per 1000. By mail postpaid.
R. MANN & SON, Lansing, Mich.

Lily of the Valley Bulbs.
THE STAR BRAND
SPECIALLY RECOMMENDED FOR LATE FORCING.
We are now booking import orders for shipment from Hamburg in October or November.
REISS & BRADY,
280 Washington Street, New York.

J. W. Eldering,
CUSTOM-HOUSE BROKER and FORWARDER
78 Barclay St., New York.
Solicits the favor of your shipments for the coming season. Prompt and careful attention guaranteed. Charges reasonable.

LILIUM HARRISII.
Original and largest growers of this important bulb.
OUR SPECIALTY!
True Stock. Lowest Prices. Best Quality.
F. R. PIERSON CO.,
TARRYTOWN-ON-HUDSON, NEW YORK.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.



Write for Wholesale List.

MICHEL PLANT AND BULB CO., ST. LOUIS, MO.

HULSEBOSCH BROS., BULB AND PLANT GROWERS,

OVERVEEN, near Haarlem, HOLLAND.

	Per 100	1000
Lilium Harrisii, 4 to 5-inch in circ.	$2.20	$19.00
" " 5 to 7-inch in circ.	3.00	24.00
" " 7 to 9-inch in circ	5.25	47.00
" " 9 to 12-inch in circ.	11.00	100.00
Lilium Longiflorum 10 per cent dearer than Lilium Harrisii.		
Roman Hyacinths, extra selected	2.50	22.00
" " top roots	3.00	25.00
Narcis. Totus Albus, extra selected	1.00	7.50
" " " Grandiflor'm, ext. s'le'd	1.30	11.00

Fall Wholesale Catalogue now ready. Address

A. HULSEBOSCH,

P. O. Box 3118. Warehouse 58 West Street, NEW YORK CITY.

BENJAMIN RIMBAUD, BULB GROWER,

Quartier du Temple. Toulon, var. France.

Cable address Benrimbaud, Toulon.

The largest cultures in the South of France, of **WHITE ROMAN HYACINTHS,** Narcissus Paper White grandiflora, N. Double Roman, N. Double Von Sion, true pure yellow, and other Daffodils. **Lilium Candidum,** the largest bulbs. Freesias, Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A. Double Rosette the earliest, etc. Prices on application.

Mention American Florist

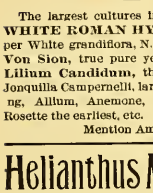
Helianthus Maximillianus

This noble perennial herbaceous Sunflower grows to the height of ten (10) feet in good rich soil, and blooms in the Fall, throwing grand spikes of its beautiful single flowers.

Strong plants, $1 per doz.; $6 per 100.

EDWIN LONSDALE,

WYNDMOOR, near Chestnut Hill, PHILADELPHIA.



TRY DREER'S GARDEN SEEDS, Plants, Bulbs & Requisites. They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.

HENRY A. DREER, Philadelphia, Pa.

Mention American Florist.

IMPORTED ORCHIDS.

Cattleya Mossiæ just arrived in splendid condition. **East Indian Orchids** have arrived. Among them will be a grand lot of **Vanda Cœrulea, Cypripedium Insigne,** collected in the original district from which all the choicest varieties have come, **Cymbidium Eburneum, C. Mastersii, C. Devonianum, C. Giganteum.** Also **Dendrobium Nobile, D. Farmersii, D. Chrysotoxum, D. Thyrsiflorum, D. Aureum, D. Densiflorum, D. Devonianum, D. Cambridgeanum** and **other Dendrobes,** together with a small lot of **Phajus Wallichii** and **Pleiones.** Prices of the above on application.

Of **Established Orchids** a fine selected stock of **Cattleya Trianæ,** well established in 6-inch pots and will produce four to eight flowers each next winter. Many very choice varieties will be found among them. Single plants $2.50; 12 for $25.00; 100 for $175.00. Terms sixty days to buyers with satisfactory references, or 5 per cent discount for cash.

IG. FORSTERMAN, NEWTOWN, N. Y.

Two leading Florist Flowers: CHRYSANTHEMUMS AND ROSES.

ALL THE NEW AND SELECTED STANDARD VARIETIES. . . . . .

My stock of all are as fine as can be produced at reasonable rates.
Complete list of these will be mailed to all applicants in the trade.

JOHN N. MAY, Summit, N. J.

PANSIES

from flats, showing flower, fine strain, $1.00 per 100; $7.50 per 1000.
Achillea "The Pearl," from flats, $2.00 per 100.
Rooted Cuttings Evergreens and Shrubs, $2 to $4 per 100.

ROGERS NURSERIES, Moorestown, N. J.

THE TOTTENHAM NURSERIES Lt'd, DEDEMSVAART, HOLLAND.

(OLD FIRM A. M. C. JONGKIND CONINCK.)

Hardy home-grown bulbs and flower roots, herbaceous plants, ferns, hydrangeas, aquatics, young fruit trees rhododendrons, conifers, etc., for fall importation. Catalogue free on application to their sole agents.

C. C. ABEL & CO., P. O. Box 920, New York.

Alternanthera Aurea Nana.

Per 100	$ 2.50
Per 250	5 00
Per 1000	20.00

NATHAN SMITH & SON,

167 W. Maumee St., ADRIAN, MICH.

CHRYSANTHEMUMS.

2½ inch, $4 per 100.

SMILAX—1st class, from 2½ inch pots, $2.50 per 100; $20.00 per 1,000. Samples free.

Address **J. G. Burrow,** FISHKILL, N. Y.

PYRETHRUM ULIGINOSUM. (Hardy.)

The Daisy that blooms in the Fall. Plants in 3-inch pots, $5.00 per 100.

CHRYSANTHEMUMS.

All the leading kinds for cut flowers; in thumb pots, $3.00 per 100; $25.00 per 1000. My selection.

EDWIN LONSDALE,

WYNDMOOR Station: Chestnut Hill P. O., PHILA. on Phila. & Reading R. R. from 12th & Market Sts.

—Prices Further Reduced—

CAPE COD PINK POND LILY.

For price list, Plants and Cut Flowers, address the original cultivators,

Chipman Bros.,

SANDWICH (Cape Cod), MASS.

You Need a Copy —OF OUR—

Trade * Directory

AND

REFERENCE BOOK

if you do not already have one. We will send you one together with our Supplement for 1893 **for $2.00.**

AMERICAN FLORIST CO.,

P. O. Drawer 164. *CHICAGO.*

FILL UP HOUSES FOR SUMMER.

Fine young plants, potted now, will be worth many times the money by autumn.

ALL EXTRA STRONG.

PALMS.	Per 100
Latania Borbonica, 2 inch pots.	$ 5.00
Cocos Plumosa, or Weddelliana, 2 inch pots	10.00
Cocos Weddelliana, 3 inch pots	20.00
Areca Baueri, 3 inch pots	10.00
Cocos Plumosa and Weddelliana, strong, from seed boxes	5.00
Latania Borbonica, from seed boxes	2.00
ORNAMENTAL FOLIAGE.	
Dracæna Terminalis, 2 inch pots	6.00
Dracæna, 20 finest sorts, 2 inch pots	10.00
Ornamental Foliage, 25 beautiful varieties, 2 and 3 inch pots	10.00
Crotons, 20 very fine sorts, 3 inch pots	15.00
Caladiums, 20 very fine sorts, 2 inch pots	10.00
Pandanus Utilis, 4 inch pots	25.00
Musa Ensete, 4 inch pots	20.00
FLOWERING PLANTS.	
Citrus Otahitiensis, 2 inch	10.00
" " extra, in 5 inch	25.00
Achimenes, 6 fine colors, mxd, 5-in. pots, full	25.00
Wistaria Chinensis, 2 inch	5.00

JOHN H. LEY,

ANACOSTIA, D. C.

Mention American Florist.

SAMUEL HENSHAW, LANDSCAPE GARDENER,

West New Brighton, N. Y.

Arrangement and planting of grounds. Advice given in remodeling old places. Plans and estimates on application.

100,000 SMILAX PLANTS.

From 2-inch pots, for June delivery, at $2 per 100; $15 per 1000. Terms strictly cash. Orders booked now. Address

FRED SCHNEIDER, Wholesale Florist,

WYOMING CO., ATTICA, N. Y.

Cyclamens.

	Doz.	Hundred
Select strains, in 3½-in pots	$1.00	$8.00
H. P. Roses. Select named kinds	1.50	10.00
Smilax, stocky, well-hardened Seedlings, per thousand,	6.00	.75

F. A. BALLER,

BLOOMINGTON, ILL.

Mention American Florist.

Portsmouth, N. H.

The estate of Hon. Frank Jones has improved greatly during the past eighteen months under the care of Mr. Robt. Paterson. The improvement is particularly noticeable in the palm and stove houses. The large palm house is one hundred and fifty feet long, twenty-five feet wide and twenty-seven feet high and in it are some of the finest specimens in the country.

The plants were put out in a solid bed about three years ago, and in that time have made an almost incredible growth. There are four very handsome plants of Livistona rotundifolia about five feet high, several magnificent kentias and a grand specimen of Areca Baueri standing eighteen feet high, and many others.

In the stove house the crotons are in fine form and beautifully colored. The finest varieties are Lady Zetland, Sunshine, interruptum, Disraeli and Queen Victoria, and they are largely used for house and table decoration. In this house are some good nepenthes, the very large pitchers being secured by occasionally cutting the leading growths back.

In ferns there are fine specimens of such desirable sorts as Nephrolepis exaltata plumosa, Goniophlebium subauriculatum and Adiantum Farleyense. The graperies are looking particularly well this year, as also are the peach houses.

There are three large houses devoted to bedding plants. Mr. Paterson has an immense amount of carpet bedding to do, there being about eight acres of flower garden and pleasure grounds. One of the features of this place is the splendid hedge of Norway spruce which encloses the flower garden, and which, although only three years planted, is now five feet high and the same distance through at the base, and makes one of the best hedges for this latitude.

Toronto.

The planting out season is about over now and gardens begin to look gay with bloom and foliage. It has been a very short season and in consequence perhaps not quite as good as last year from a business standpoint. A good deal of "cutting" has been indulged in too.

At this time of year gentlemen of our profession get very little opportunity for gossiping, consequently your correspondent has had no chance to collect notes this week.

Cut flowers are plentiful and cheap now, but owing to schools and colleges closing there is a pretty brisk demand for them. E.

PREPARE NOW FOR OUR CONVENTION NUMBER AND COLUMBIAN SOUVENIR.

SMILAX. Good, stocky little plants once reset, they can be packed very light and are cheap of transportation, cheap in price and not dear at the end. A sample will cost only 10 cts. and convince you. Price, per 100 75 cts.; per 1000 $6.00.
Watch for my pansy ad. soon, it will have some new facts.
TERMS CASH
L. B. 496. ALBERT M. HERR, LANCASTER, PA.

Carnations All Sold
We still have some Fine Plants of
The Best Yellow Canna, NELLIE BOWDEN, 75c each, $8.00 per dozen
JOHN McGOWAN, - - Orange, N. J.

Swainsona galegifolia alba.
Nice young plants in 2¼in. pots, $3.00 per dozen. STOCK LIMITED.
EDWIN LONSDALE,
WYNDMOOR, near Chestnut Hill, PHILADELPHIA.
Money Order Office, Station "G," Phila.

Siebrecht & Wadley,
ROSE HILL NURSERIES,
NEW ROCHELLE, N. Y.
Palms, ORCHIDS Roses, and New Plants.
FRESH DRACAENA CANES NOW READY.

ORCHIDS.
The Finest Stock in the World.
SANDER'S, ST. ALBANS, ENGLAND.
Thirty minutes from London.
Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City.

ROEMER'S SUPERB PRIZE PANSIES
The finest strain of Pansies in the World.
Introducer and Grower of all the leading Novelties.
Catalogue free on application.
FRED. ROEMER, SEED GROWER,
QUEDLINBURG, GERMANY.

HEADQUARTERS for WATER LILIES
Now is the time to plant all tender and tropical varieties without risk and loss. Secure your stock early. Prices moderate. Send for Catalogue.
WM. TRICKER, DONGAN HILLS, NEW YORK.

6,000 Alternanthera paronychioides major and aurea, at $5.00 per 100.
6,000 Echeveria glauca, 2½ to 3-inches in diameter, $3.00 per 100; $25.00 per 1000.
3,000 English Ivies, 3 to 4 feet high, from 3½-inch pots, $5.00 per 100.
5,000 Smilax, from 2-inch pots, $2.00 per 100.
5,000 Mountain Daisies, red and white, $2.50 per 100.
Coleus Golden Bedder and Verschaffeltii, from 2½-inch pots, $3.00 per 100; from 3½-inch pots, $4.00 per 100.
JOHN RECK, BRIDGEPORT, CONN.

Cycas Revoluta
The Largest and Best Selected Stock of Cycas Revoluta, fronds and roots cut off, true long leaved variety, now on hand.
For general Japanese and Australian stock, apply to
F. GONZALEZ & CO.,
303-312 Wayne St., SAN FRANCISCO, CAL.
Send for catalogue

E. G. HILL & CO.,
Wholesale Florists
RICHMOND, INDIANA.

FIELD GROWN CARNATIONS.
50,000 Ready in the Fall.
W. R. SHELMIRE,
CHESTER CO., AVONDALE, PA.
Correspondence Solicited.

CARNATIONS.
A SPECIALTY.
Full stock of all the new and leading varieties. Rooted Cuttings, Young Plants, and Field Grown Plants in season. Get our prices before purchasing.
GEO. HANCOCK,
GRAND HAVEN, MICH.

Phœnix rupicola.
This useful and beautiful Date Palm in EXTRA FINE PLANTS, growing in from 7 to 10-inch pots, from $3.50 to $7.50 each, according to size.
EDWIN LONSDALE, Wyndmoor,
STATION "G," (Chestnut Hill P. O.) PHILADELPHIA.

CARNATIONS
Rooted Cuttings all sold or planted out.
FIELD GROWN PLANTS IN SEASON.
Correspondence Solicited.
C. J. PENNOCK, THE PINES,
Chester Co., KENNETT SQUARE, PA.

CARNATIONS
ROOTED CUTTINGS
of all the leading varieties. Will be ready January 1, 1893.
R. T. LOMBARD, Wayland, Mass.

ROOTED CUTTINGS of CARNATIONS
By the Wholesale.
Ready now. This is the best time for intending buyers to supply themselves. offer them at moderate prices. Send for Price List. Address
JOSEPH RENARO, Unionville, Chester Co., Pa.

CATALOGUE PRINTING.
ELECTROTYPING.
Done with expert ability for Florists, Nurserymen, Seedsmen. Write to
J. Horace McFarland Co.,
HARRISBURG, PA.

Cape Flowers, new crop in best white quality at $1.00 the lb.; 10 lb. lots, $9 net.

Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 28-in. upwards, at 40c., 45c., 50c., 60c., 75c. and $1.00 each, according to length.

Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.

Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.

Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc. For prices consult our

Trade Catalogue, mailed free.

August Rölker & Sons,
136 & 138 W. 24th St., P. O. Station E. **New York.**

H. BAYERSDORFER & CO.,
WHOLESALE
FLORISTS' SUPPLIES ONLY,
56 N. 4th Street,
PHILADELPHIA, PA.
Our new Catalogue is now out, free upon application.

MARSCHUETZ & CO.,
Florists' Supplies,
23 & 25 N. 4th St., PHILADELPHIA, PA.
Send for Catalogue.

ERNST KAUFMANN & CO.,
Florists' Supplies,
113 NORTH 4TH STREET,
PHILADELPHIA, PA.

WHITE DOVES
FOR FLORISTS.
Largest and finest stock in the United States. Write for prices to
S. J. RUSSELL,
850 Montgomery St., Jersey City, N. J.

Asparagus Plumosus Nanus,
from 4-inch pots, fine stock.
Per hundred ..... $ 32.50
Per thousand 300.00
50 at 100 rate; 250 at 1000 rate.
1000 SMILAX to spare, from 2½-inch pots, at $2.00 per 100; $18.00 per 1000.
THEO. BOCK.
Miami Street, HAMILTON, OHIO.

TRADE MARKS. COPYRIGHTS.

SOLICITOR OF U. S. AND FOREIGN PATENTS,
Atlantic Building, Washington, D. C.
(Send sketch or model for free examination as to patentability.)

Always mention the American Florist when writing to advertisers.

LOUIS BOEHMER. ALFRED UNGER.

Extract of Wholesale Catalogue 1893-'94.

L. BOEHMER & CO.,

4, 5 & 28 Bluff, Yokohama, Japan.

	Per 1000
Lilium Auratum, 5 to 7 inches in circumference	$ 15.00 silver
" " 7 to 9 " "	18 00 "
" " 9 to 11 " "	30.00 "
" " 11 to 13 " "	50.00 "
" " rubro vittatum, 6 to 7 inches	250.00 "
" " " " 7 to 9 inches	275.00 "
" " macranthum (magnificent large flower) 7 to 9 inches	50.00 "
" " " 9 to 12 inches	120.00 "
" Longiflorum eximium, 4 to 6 inches	15 00 "
" " " 6 to 8 "	20.00 "
" " " 8 to 10 "	30.00 "
Iris Kæmpferi, strong clumps, best selected, 100 varieties	75.00 "
Nerine Japonica, the pink Japanese Spider Lily	30.00 "
Pæonia Arborea, 100 best varieties, double and half double	300.00 "
" Herbacea, new varieties	250.00 "
" " common varieties	150.00 "

Season begins in August. **Send orders early therefore. PRICES ARE FREE ON BOARD IN YOKOHAMA** 100 gold dollars are about $145.00 silver. **Freight** to all United States points per Northern Pacific Railroad Co., 1½ cents gold per pound to San Francisco. $8 to $10 gold per ton, 40 cubic feet measurement.

PAYMENT. Orders sent direct to us must be accompanied by a remittance (bankers draft or other usual credit) to the full value. If freight is to be prepaid the remittance should cover that cost also. Our bankers are the Hong Kong and Shanghai Banking Corporation. Agencies: San Francisco and New York. Please write for Catalogues. We are the **oldest** and only European firm in the country, established 1882. The most of Japanese novelties were introduced by us.

CYCAS REVOLUTA, the true long leaved variety, stems from 6 inches to 4 feet, are collected by Mr. A. Unger every year. 1000 pounds, fronds and roots cut off, $50.00 silver. Please send your orders before November.

CABLE ADDRESS: **BOEHMER, YOKOHAMA.**

J. J. MOSER,
Versailles Nurseries,
VERSAILLES, - FRANCE.
Cable Address: MOSER, VERSAILLES, FRANCE.

SPECIALTIES.
Hardy Rhododendrons, Azaleas, Kalmias, Palms, Fruit Trees, Rose Trees, Japanese Maples, Ornamental Trees, Orchids, Perennials.
Grand Choice of Extra Large Conifers.
Catalogues sent on Application.
A. MOSER, Agt.,
2223 Cottage Grove Ave., CHICAGO, ILL.

PANSY SEED. PANSY
The Jennings strain of large flowering and Fancy Pansies, new crop now ready, 8 pounds of seed and over 500,000 plants were sold last season. This strain is popular, and why? Because Florists can depend on getting only First Class Stock. I shall sell no other. My aim is to supply the best Finest Mixed, all colors, trade packets 25 cents, 50 cents, and $1.00; per ounce $6.00. Pure White (the finest) trade pkt. 50c. and $1.00; Golden Yellow, dark eye, trade pkt. 50c. and $1.00. Send for price list for other varieties. Pansy Plants, ready September 1 to December 25, any size wanted, cold frame size 65c. per 100 by mail; $5.00 per 1000 by express; 5,000 $20. Large flowering plants $1.00 per 100; $8.00 per 1000. Cash with order.
ADDRESS **E. B. JENNINGS,**
WHOLESALE PANSY GROWER,
Lock box 254 SOUTHPORT, CONN.

Well Rooted Cuttings
Grace Wilder, Silver Spray, Lamborn, Portia, ready to plant out of doors, $1.00 per 100. Chrysanthemum, Stevia, Double Alyssum, L. McGowan, Double Petunia, Lobelia, Fuchsia, Coleus, Alternanthera, Paris Daisy, Verbena, Calla, Pink, Tradescantia Zebrina, Mme. Salleroi, Rose, Ivy, Foliage and flowering geraniums, $1.00 per 100.
DENVER CITY NURSERIES,
SOUTH DENVER, COLO.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

Special Offer
FOR THE NEXT THIRTY DAYS.

LATANIA BORBONICA.
5-inch pots, strong, per doz., $9.00,
4-inch " " " $6.00.
3-inch " " " $2.00; per 100, $15.00.
2½-inch pots, strong, per doz., $1.00; per 100, $8.00.

PTERIS SERRULATA.
3-inch pots, $1.00 per doz.; $7.00 per 100.

ARECA LUTESCENS, 2½-in. pots per 100 $10.

ASPARAGUS TENUISSIMUS.
3-in. pots, per doz., $1.00; per 100, $8.00.
2½-in. pots, per doz., 50c; per 100, $4.00.

CYPERUS ALTERNIFOLIUS.
4-inch pots, per doz., $1.25.
3-inch pots, per doz., 75c.
2-inch pots, per doz., 50c.

Address **NATHAN SMITH & SON,**
167 W. Maumee St.,
ADRIAN MICH.

PANSIES.
During the season we shall have plants of best German strain of Pansies, at lowest prices.
BRAUER & RICHTER,
McCONNELSVILLE, OHIO.

CHICAGO.
My Catalogue for the American trade being now ready, copies can be had at my exhibit at the World's Fair, or from my address,
OSCAR TIEFENTHAL,
Wandsbek, Hamburg, Germany.

Foreign Notes.

Among new ferns recently exhibited abroad is Pteris longifolia Mariesi; it is dwarfer than the type, having closely set pinnæ with wavy margins. Another recent acquisition is Gymnogramme Mayi; the fronds are triangular and much divided, the upper surface silvery green, the lower covered with silvery powder.

Among new caladiums we find M. Leon Say, a dwarf variety having bronzy-red leaves with deep red veins and rosy violet spots; Charlemagne, an immense leaf, coral red, growing paler towards the margin; and Mrs. H. Veitch, deep red with vermilion veins.

Mimulus gloriosa is a very showy variety of musk which has appeared at some of the foreign exhibitions. It has a velvety scarlet flower three inches across, having a golden throat spotted with brown and black.

Denver.

The South Denver Florist Co. have just moved into their new Printing Building. The *Western Garden* will be published here. Geo. Clark finds his carnation trade able to stand another carnation house. Avery Gallup is first to build hybrid houses. His Jack house is just planted. If a few more would follow spring roses would be of a much better quality. Mr. Adams, his foreman, has already gained a place among the first of our growers. His standard chrysanthemums are of the very best. LYLE.

Germantown, Pa.

At a meeting of the Germantown Horticultural Society on June 14, Mr. E. C. Gillette read a paper on "Mildew and its effects on growing vegetation if allowed to continue." It was decided to hold a chrysanthemum show at the Colonial Club House, Manheim, during the second week in November. There was an interesting exhibit of cut roses, begonias, etc.

Tree Fern Notes at the World's Fair.

"Gosh, Kate, see them darn things growing on that old stump!" This was spoken in the key of F and was followed by laughter long and loud.

"What good are they for anyway?"

"Can you tell me if these are set in that stump?"

"They're a kind of palm trees."

"What are these 'ere two. Cocoanuts grows on them trees." A. GILCHRIST.

JUNE CLEARING SALE
OF PLANTS.

	Per 100
Begonias, good assortment	$ 3.00
Fuchsias, 2-inch pots, including Storm King and Phenomenal	2.00
Coleus, 2-inch pots, good vars.... $12.50 per 1000.	1.50
Pansies	1.50
Alternanthera P. major	2.00
" Aurea nana, Tricolor and Versicolor,	1.50
Mexican Primrose	2.00
Anthemis Tinctoria	2.00
Smilax	2.00
Bryophyllum Calycinum	3.00
Clerodendron Balfouri	3.00
Pothos aurea (Vase Plant), beautifully marked.	6.00
Rosemary, 4-inch pots	each 10c.

ROBT. S. BROWN & SONS,
1315 Wabash Ave., KANSAS CITY, MO.

P. SEBIRE & SONS,
Nurserymen, USSY, Calvados, FRANCE.

A general assortment of Fruit Tree Stocks, such as Apple, Pear, Myrobolan Plum, Mahaleb and Mazzard Cherry, Angers Quince, Small Evergreens, Forest Trees, Ornamental Shrubs, Roses, etc. The largest stock in the country. Prices very low. Packing secured. Catalogue free. Send for quotations before placing your order elsewhere. Agents for U. S. America and Canada.

C. C. ABEL & CO., P. O. Box 920. New York.

HOW TO GROW CUT FLOWERS.

A PRACTICAL TREATISE ON

THE CULTIVATION OF THE ROSE,

And Other Flowering Plants for **Cut Flowers**, sent to any address upon receipt of **$2.00.** **M. A. HUNT, Terre Haute, Ind.**

W. C. KRICK'S
PATENT
Florists' Letters, Etc.

Highest Award wherever exhibited.

These Letters are made of the best immortelles, wired on wood or metal frames having holes drilled in them to insert toothpicks, by which to fasten them in the design. All infringements prosecuted.

2-inch Letters, $3 00 per 100. Postage, 15c. per 100.

Before purchasing send for free sample and Catalogue and compare with any other letter in the market.

W. C. KRICK, 1287 Broadway, BROOKLYN, N. Y.

Agents:—J. C. VAUGHAN, Chicago, Ill.; H. BAYERSDORFER & Co., Phila., Pa.; N. STEFFENS, N. Y.; AUG. ROLKER & SONS, N. Y.; ED. S. SCHMID, Washington, D. C.; JAMES VICK'S SONS, Rochester N. Y.; T. W. WOOD & SONS, Richmond, Va.; J. A. SIMMERS, Toronto, Ont.

BOSTON FLORIST LETTER CO.,
13 Green Street, BOSTON, MASS.
Address all correspondence to 1 Music Hall Place.

Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1½-inch and 2-inch, $2.00 per 100. Patent fastener with each letter.

With orders for 500 letters we give away a nicely stained and varnished box. See cut in next week's American Florist.

Our letter is handled by all the wholesalers in Boston.

AGENTS: Marschutz & Co., 25 N. 4th St., Philadelphia, Pa.; A. Rolker & Sons, New York; F. E. McAllister, 22 Dey St., N. Y.; Ernst Kaufmann & Co., 113 North Fourth Street, Philadelphia; H. Bayersdorfer & Co., Philadelphia, Pa.; A. D. Perry & Co., 35 Warren Street, Syracuse, N. Y.; A. C. Kendal, 115 Ontario St., Cleveland, O.; E. H. Hunt, 79 Lake St., Chicago; Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.; H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O.; T. W. Wood & Sons, 6th and Marshall Sts., Richmond, Va.; Jas. Vick's Sons, Rochester, N. Y.; Dan'l B. Long, Buffalo, N. Y.; C. A. Kuehn, St. Louis.

J. A. Simmers, Toronto, Ont., Agt. for Canada.

SEND FOR A COPY
— OF OUR —
TRADE DIRECTORY
AMERICAN FLORIST CO., CHICAGO

LITTLE'S ANTIPEST.
— A —
Valuable Discovery of the 19th Century.
SILVER MEDAL AWARDED
— BY THE —
CALIFORNIA STATE FAIR OF 1890.

This preparation is a sure destroyer of the **Scale, Wooly Aphis** and **Insect Pests** of any and all descriptions. It may be as freely used in the conservatory, garden and greenhouse as in the orchard or vineyard. It is non-poisonous and harmless to vegetation when diluted and used according to directions. It mixes instantly with cold water in any proportion. It is **Safe, Sure** and **Cheap.** No fruit grower or florist should be without it.

Send for Circulars and Price List.

R. W. CARMAN, General Agent,
291 AMITY STREET,
FLUSHING, Queens, Co., N. Y.

CUTS!

Wood Engraving,
Zinc Etching,
Half-Tone,
Wax Engraving, Photo-Engraving,
Designing.

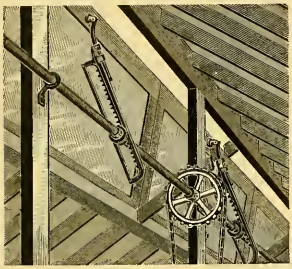
MANZ & CO.,
183 Monroe Street, CHICAGO. ENGRAVERS.

FLORAL DESIGNS
The Cut Flower Worker's friend. Fine book of 160 pages. Send **$3.50** for it, to
J. HORACE McFARLAND, Harrisburg, Pa.

Please mention the AMERICAN FLORIST every time you write to an advertiser.

SEE HERE BROTHER FLORIST!

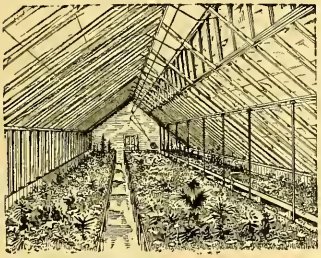
Arn't you tired going through your houses two or three times a day year after year and lifting your ventilating sash one at a time and propping them up with sticks or pots, with a chance of having sash blown off and broken glass to pay for? If you are



We have got just the thing you need, the **Newest** and **Best** thing out. "The New Departure" for **about half** the cost of the old style. Send for Descriptive Catalogue to

J. D. CARMODY, Evansville, Ind.

THE CHAMPION



Automatic Ventilator.

The cheapest, easiest to operate, and by far the best machine in the market. Don't buy a Ventilator until you have seen my illustrated descriptive circular, which will be sent you free, giving prices, etc. Also **Champion Soil Pulverizer and Sifter.**

Address, **E. E. WOLF,**
Box 114. SPRINGFIELD, O.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

Clear Cypress,

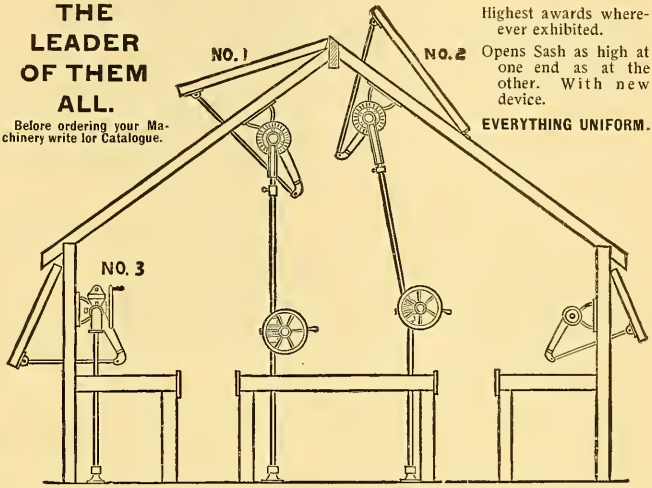
from bottom gutter up is my specialty.

Lyman Felheim,
ERIE, PA.

STANDARD VENTILATING MACHINERY,

THE LEADER OF THEM ALL.

Before ordering your Machinery write for Catalogue.



Highest awards wherever exhibited.

Opens Sash as high at one end as at the other. With new device.

EVERYTHING UNIFORM.

E. HIPPARD, YOUNGSTOWN, OHIO.

SMITH & WEBSTER,

MAKERS OF

GREENHOUSE PIPE

FOR HOT WATER AND STEAM,

193 Lake Street, - CHICAGO. ILL.

FRENCH GLASS For CONSERVATORIES, ROSE HOUSES, Etc. Etc.

VANHORNE, GRIFFEN & CO.,

Importers of PLATE and WINDOW GLASS. Manufacturers of BENT GLASS and FRENCH MIRRORS.

131-133-135-137 FRANKLIN STREET, NEW YORK.

Note—Imported Glass is used in the best grade of Greenhouse building.

J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS • Greenhouse Material,

LOUISVILLE, KY.

Mention American Florist.

STANDARD HOSE MENDER.

The only Mender using ordinary galvanized wire No. 14, instead of expensive bands. Any person can handle it with perfect ease. Thousands in use and all testify to its Wonderful Merits.

Sample Box, by Mail, 50 cts.

E. HIPPARD, Youngstown, Ohio.

THE WABASH

. . . WILL BE THE . . .

"FLORISTS LINE" TO THE ST. LOUIS CONVENTION, as well as returning.

Write F. A. PALMER, Gen'l Pass. Agt., 201 Clark Street, CHICAGO.

It is expected a party will be made up leaving Chicago about August 7.

THE PERFECT DRAINAGE

BENCH TILE

For circulars, etc., address

W. P. Wight, Upland Green Houses,

Send your business card. MADISON, N. J.

Please mention the American Florist every time you write any of the advertisers on this page.

Cincinnati.

The season for the cut flower trade in this city is virtually past. Our growers are all throwing out and planting in order to be ready for next fall's trade. John Rose, the superintendent of the McFadden plant, has leased said plant for a term of years and will now be his own grower. Mr. Rose is the orchid grower of Cincinnati, and he also has splendid success with everything he undertakes. Look out for him at the chrysanthemum shows this fall.

Walter J. Gray is the summer grower as well as winter. His roses for the time of year are splendid. He also has a "new red rose" which he will put on the market in about one year. It is solid like the Bride and Mermet, has the color of the American Beauty, is of good size and is a splendid keeper. It is the only red monthly rose that has all these good qualities combined. Walter has reason to be proud of this discovery.

Ben George—"Genial Ben"—has decided that he has been staying alone long enough and on the 21st inst. will take unto himself a wife. His many friends extend to him their hearty congratulations.

Messrs. Corbett & Wilson will grow one large house of American Beauties this season. Roses and carnations are their specialties.

We expect to hear from Dick Witterstaetter before many months with some splendid new varieties of carnations. Dick has them and is only waiting until he has given them a thorough trial before putting same on the market.

Chas. A. Getz will build some new houses this summer for carnations. We have numerous other growers that the trade will hear from later.

The Cincinnati Florists' Society is again picking up new members, having taken in four at our last meeting, and as our market advances the growers and store men are gradually coming into the fold. At our last meeting the society set aside $50 to pay for a suitable prize to be competed for at Chicago in August. We expect to have a goodly number for St. Louis, and Chicago the week following.

Trade for the last month has been decidedly better than last year at this time. Some of our growers are forcing valley from cold storage and it is splendid.

It has been decided that Cincinnati will hold a chrysanthemum show this fall.

E. G. GILLETT.

EVANS' IMPROVED
CHALLENGE VENTILATING APPARATUS
Write for Illustrated Catalogue.
QUAKER CITY MACHINE WORKS, Richmond, Ind.

FLORISTS' HOSE,
Made by E. W. Holt, member of the Society of American Florists.
Goodyear Rubber Store,
2 W. 14TH ST. NEW YORK.

Lawn Vases.
THE LARGEST IN THE MARKET FOR THE MONEY.
17x29-inch ....price $1.00.
17x34-inch, with base, price $1.75.
20x22-inch .....price $1.50.
20x25-inch, with base, price $2.25.
Send for our price list of Standard Flower Pots, Plain and Fancy Vases, etc., etc. Terms cash f. o. b.
HILFINGER BROS. POTTERY, Ft. Edward, N. Y.

Mention American Florist.

THE "LOCKLAND" Sash Bars
ARE ALWAYS SATISFACTORY.
This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.
GUTTER MATERIAL, RIDGES, SASH, ETC.
The finest CLEAR CYPRESS used.
Write for circulars and estimates.
LOCKLAND LUMBER CO.
Lockland, O.

"Standard" Flower Pots.
As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address
The Whilldin Pottery Company,
BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.
Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.
A. H. HEWS & CO., N. Cambridge, Mass.

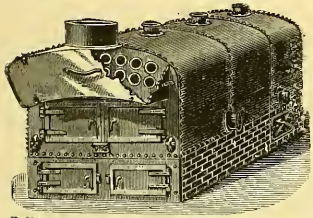
Standard Flower Pots.
We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.
SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

NEW BRIGHTON POTTERY
Manufacturing the
ELVERSON, SHERWOOD & BARKER
STANDARD FLOWER POTS.
Write for an illustrated catalogue and price list of Pots, Lawn Vases, Hanging Baskets, Bud Pots, etc.
ADDRESS PITTSBURGH CLAY MF'G CO., New Brighton, Pa.

H. M. HOOKER COMPANY,
57 and 59 W. Randolph Street, CHICAGO,
NATURAL GAS MADE GLASS
FOR GREENHOUSES.
Write for latest prices.

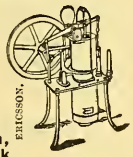
THE WILKS HEATER,
FOR HEATING
GREENHOUSES, STORES, DWELLINGS, ETC.
Manufactured by THE S. WILKS MF'G CO. 123 S. Clinton St., CHICAGO, ILL.
SEND FOR CATALOGUE.

KROESCHELL BROS.
IMPROVED
Greenhouse Boiler,
41 to 55 Erie St., CHICAGO.



Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around front, sides and back). Write for information.
Mention American Florist.

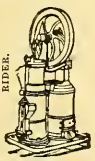
WATER
For Your
GREEN HOUSE,
ROSE HOUSE,
NURSERY,
Conservatory, Lawn, House, Garden, Stock or any other purpose.
Send for Illustrated Catalogue
OF THE
DE LAMATER-RIDER AND DE LAMATER-ERICSSON
PUMPING ENGINE.



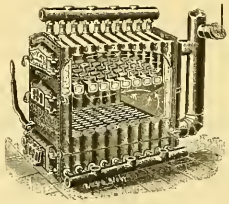
ERICSSON.

HOT-AIR PUMPING ENGINE.

Their operation is so simple and safe that a child can run them. They will pump water from shallow streams or any kind of well. They can be arranged for any kind of fuel. Capacity 1,500 to 30,000 gallons of water a day, according to size.
The De Lamater Iron Works,
87 South Fifth Avenue,
NEW YORK, N. Y.



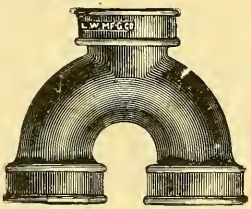
RIDER.



Royal Heaters.
—:o:—
HOT-WATER,
STEAM.

THE
DUST DAMPER
IN BASE
makes an excellent check in mild weather.
SAVES FUEL.
HART & GROUSE,
UTICA, N. Y.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.
Pipe can be easily put together by any one, very little instruction being needed.

GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.
Mention American Florist.

L. WOLFF MFG. CO., 93 to 117 W. Lake Street, CHICAGO.
WRITE FOR ILLUSTRATED CIRCULAR.

Pat. 1882, '85, '86, '88 '90, '91.

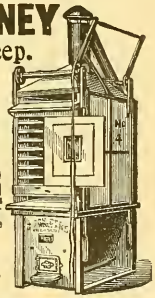
FOR WATER, AIR, STEAM, ACIDS, OILS, LIQUORS, GAS, SUCTION,
And for any and every purpose for which a hose can be applied.
Sizes, ¼-inch to 42 inches diameter.
The making, vending or use of any Serviceable Armored Wire Bound Hose not of our manufacture is an infringement on one or more of our Patents. The rights secured to us render each individual dealer or user responsible for such unlawful use with all the consequences thereof. For prices and discounts address WATERBURY RUBBER CO., Sole Mf'rs and Owners of all the *Sphincter Grip Armored Hose Patents*, 49 Warren Street, New York.
J. C. VAUGHAN, Agent, CHICAGO.

IMPROVED GLAZING.
Zinc Joints for butting glass without laps. No leakage. No sliding of glass. Practically air tight. Keeps out cold winds, thereby saving fuel. No laps, saves enough glass to pay for the zincs. No breakage of glass on account of frost or ice. Some of the largest growers in the country are using "Gasser's Patent Zinc Joints" with entire satisfaction.
Write for sample and price list.
J. M. GASSER, FLORIST,
101 Euclid Ave., CLEVELAND, O.

OUR
Sash Lifter AND Hinges
will do the work and cost you less than any other. Send your name and address and we will mail you description and price.
BAY STATE HARDWARE CO.
272 Freeport Street, BOSTON, MASS.
Mention American Florist.

GLASS. ROCK BOTTOM PRICES. Send for Estimate. Satisfaction Guaranteed.
REED GLASS CO.,
65 Warren St., and 46, 48 & 50 College Place, New York City.

MAKE MONEY
While You Sleep.
STAHL'S
EXCELSIOR
FRUIT DRIER



Evaporates Fruit DAY and NIGHT. Catalogue free upon application.
Address
WILLIAM STAHL
EVAPORATOR COMP'Y,
QUINCY, ILL.
Mention American Florist.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.
JOHN G. ESLER, Sec'y F. H. A., Saddle River, N. J.

Index to Advertisers.

Abel C C & Co....1205 1208
Adv. Rates, etc 1202
American Boiler Co...1212
Anchorage Rose Co...1201
Baller F A. 1205
Barnard W W & Co...1204
Bay State Hdw Co....1211
Bayersdorfer H & Co 1207
Berger H H & Co.....1204
Bock Theo. 1207
Boehmer L & Co 1207
Bonsall Jos E & Son ..1202
Boston Letter Co .. . 1208
Brauer & Richter.....1207
Brown R S & Son.....1208
Brown & Canfield.. ..1201
Burns & Raynor.....1203
Burrow J G..... 1205
Burton John.....1205
Carman R W.....1208
Carmody J D..... ..1200
Chandlee Geo F 1207
Chandler L D.....1201
Chipman Bros.....1205
Cook John..... ...1201
Corbrey T J 1202 1203
Currey G W & Co 1202
De Lamater Iron Wks1211
Denver City Nurseries1207
Dreer H A..... 1205
Eldering J W 1204
Elliott W H.....1202
Ellison Wm..... 1203
Felheim Lymon.....1200
Field S B.....1200
Forstermann I.....1205
Gasser J M 1211
Gonzalez & Co.....1206
Goodyear Rubber Store 1210
Gurney Heater Co... 1212
Hall Ass'n.....1211
Hancock Geo 1206
Hart James.....1203
Hart Michael A .... .1205
Hart & Crouse.....1211
Hartford H E.....1202
Hausperger Bros & Co1201
Henslaw Samuel.....1205
Herr Albert M.....1206
Hews A H & Co.....1210
Hillinger Bros.....1210
Hill E G & Co.....1206
Hippard E 1205
Hitchings & Co.....1212
Hooker H M Co.....1210
Horan Edw C.....1205
Hulsebosch Bros.....1205
Hunt E H..... 1203
Hunt M A 1201 1208
Hunter & Purdy.....1203
Jennings E B.....1207
Kaufmann Ernst & Co1107
Kemble Floral Co .. .1201
Kemlcott Bros.....1205
Koffman E.....1202
Krick W C.....1208
Kroeschell Bros 1211
Kuehn C A.....1203
La Roche & Stahl.... 1202
Ley John H.....1205
Lockland Lumber Co..1210
Lombard R T.....1206
Long Dan'l B.....1203
Lonsdale Edwin..... .....1201 1205 1206
Lord & Burnham Co..1212
McCarthy N F & Co...1203
McFarland J H.....1208
McFarland J H Co....1206
McGowan John.....1206
Mann R & Son.....1204
Manz J & Co.....1208
Marschuetz & Co.....1207
May John N.....1205
May L L & Co 1201
Michel Plant & Bulb Co 1205
Milliner Bros.....1203
Moffatt G J.....1204
Moninger Jno C 1212
Moore Frank L.....1201
Moser J J 1205
National Plant Co 1202
Niles Centre Floral Co1203
North F W.....1201
Olson M.....1203
Ouwerkerk P.....1204
Peck & Sutherland.....1203
Pennock C J.....1206
Pennock Sam'l S 1202
Pierson F R Co. 1204
Pittsburg Clay Mfg Co1210
Prince A G & Co 1203
Quaker City Mach Co.1210
Randall A L. 1203
Reck John 1206
Reed Glass Co.....1211
Reed & Keller..... ...1211
Reiss & Brady..... 1204
Renard Joseph.....1206
Rinhaud Benj.....1205
Roberts D H.....1212
Roehrs Theo.....1203
Roemer Fred..... 1206
Rogers Nurseries.....1205
Rolker A & Sons.....1207
Russell S J.....1207
Sander & Co.....1206
Schneider Fred.....1205
Schulz Jacob.....1201
Scollay John A ..... .1212
Sebire P & Sons 1208
Shelmire W R.....1206
Sheridan W F.....1205
Siebrecht & Wadley...1206
Simons R E.....1200
Stc. Doppfel & Co...1210
Situations, wants.....1200
Smith C A Floral Co..1201
Smith Nathan & Son... .....1205 1207
Smith W L 1200
Smith & Webster.....1205
Spooner Wm H. 1200
Stahl Wm 1211
Stott Garden Imp Co..1208
Struck J N & Bro.....1209
Sunderbruch H L 1203
Tesmer Julius & Co...1202
Tesson R F.....1201
Tietenthal Oscar.....1207
Tricker Wm.....1206
Tottenham Nurseries.1205
Vander Schoot R & Son. 1204
Van Horne Griffen & Co ... .1209
Van Waveren & Kruyff.. 1204
Vaughan J C.....1201 1204
Wabash R R 1209
Waterbury Rubber Co1211
Weber & Don.....1204
Welch Bros.....1205
Whilldin Pot Co 1210
Wight W P.... 1209
Wilks S Mfg Co.....1211
Williams H W & Son..1200
Winter N D 1200
Wisconsin Flower Ex.1202
Wolf E E 1207
Wolff L Mfg Co.....1211
Wood Bros.....1201

SAN FRANCISCO.—Mrs. H. H. Berger and daughter are at a southern California mountain resort on account of the latter's delicate health. They will reach Chicago about August 1, and will devote a month to the sights of the exposition, and will attend the St. Louis convention of the S. A. F.

CYPRESS GREEN HOUSE MATERIAL

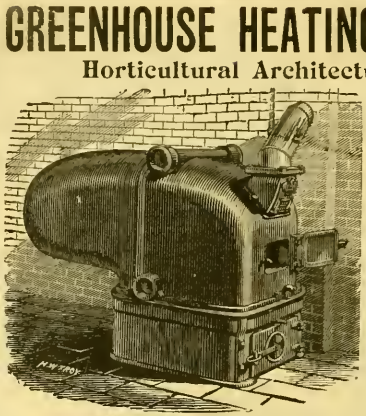
CLEAR CYPRESS BARS

HOT BED AND VENTILATING SASH

JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

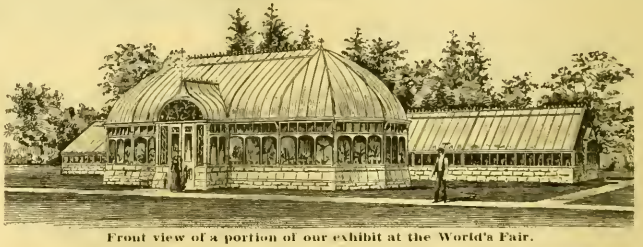
GreenhouseHH
Mass Agri Col 15 Dec 93

GREENHOUSE HEATING & VENTILATING
Horticultural Architecture and Building.



HITCHINGS & CO.
Established 1844.
233 Mercer St., New York.
FIVE PATTERNS OF BOILERS.
NINTEEN SIZES.
Perfect Sash Raising Apparatus.
Rosehouses, Greenhouses, Etc, of Iron Frame Construction, Erected complete, or the Structural Iron Work shipped ready for erection.
Iron Frame Benches with the "Perfect Drainage Bench Tile" or Slate Top.
SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUE.

LORD & BURNHAM CO.
Horticultural Architects and Builders,
STEAM AND HOT WATER HEATING ENGINEERS.
☞ Plans and estimates furnished on application.



Front view of a portion of our exhibit at the World's Fair.
. . . SEND FOUR CENTS POSTAGE FOR ILLUSTRATED CATALOGUE. . . .
LORD & BURNHAM CO., Irvington-on-Hudson, N. Y.

STEAM · AND · HOT · WATER · HEATERS
FOR
GREENHOUSE HEATING.
156
DIFFERENT SIZES.
American Boiler Company.
BOSTON, 195 Ft. Hill Square. NEW YORK, 94 Center St. CHICAGO, 34-36 Dearborn St. DENVER, Mining Exchange Bldg. SAN FRANCISCO, 80 Crocker Bldg.

D. H. ROBERTS,
159 & 161 S. Fifth Ave., NEW YORK,
NATURAL GAS MADE GLASS
for ROSE HOUSES, CONSERVATORIES, Etc., Etc.
Our Glass received the Highest Award at the Boston Convention of the S. A. F.

GURNEY Hot-Water Heaters FOR Greenhouses.
Send for a copy of our book "How best to heat our houses."
GURNEY HOT-WATER HEATER CO.
163 FRANKLIN ST., BOSTON
New York City: Johnson & Co., 71 John St. Phila: J. C. F. Trachsel, 246 Arch St. Chicago: Rice & Whitacre, 4 South Canal St

GREENHOUSE HEATING
AND VENTILATING.
Superior Hot Water Boilers.
JOHN A. SCOLLAY,
74 & 76 Myrtle Ave., Brooklyn, N.Y.
☞ Send for Catalogue.

THE AMERICAN FLORIST

A WEEKLY JOURNAL FOR THE TRADE.

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, JUNE 29, 1893.** **No. 265**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company.
Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.
322 Dearborn Street, Chicago.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,
P. O. Drawer 164, CHICAGO.

Eastern Office: 67 Bromfield St., Boston.

SOCIETY OF AMERICAN FLORISTS.

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The ninth annual meeting at St. Louis, Mo., August 9 to 12, 1893.

CONTENTS.

The World's Fair 1213
Miscellaneous seasonable hints 1214
Hardy plants 1214
Hydrangeas (with illus) 1214
Solid beds vs. raised benches 1215
Carnations—Seasonable hints 1216
Hanging baskets (with illus) 1216
New York 1216
Philadelphia 1216
Boston 1217
Toronto 1217
Baltimore 1218
Chicago 1220
The protest against floriculture 1222
Our annual convention number 1222
The seed trade 1224
Houston, Texas 1226
Patents recently granted 1226
St. Louis 1228
Former Christopher 1230

ALLENTOWN, PA.—A. B. Ellsworth is adding two new houses, 100x30 each, to his establishment.

GOUVERNEUR, N. Y.—Neener & Co. of Watertown have moved their business to this place, and will erect two greenhouses on Main street.

ST. PAUL.—The summer meeting of the State Horticultural Society was held at the State Experimental Farm, St. Anthony's Park, June 28.

FOSTORIA, O.—The cut flower and plant business of E. R. Sackett and F. W. North will hereafter be conducted under the title of "Fostoria Floral Co."

ELGIN, ILL.—The E. H. Ricker Co., nurserymen, have made an assignment for the benefit of creditors; liabilities $10,000, assets estimated at $60,000.

SAN BERNARDINO, CAL.—The Morris Nursery Co. has been incorporated with a capital stock of $65,000. The directors are O. M. Morris, J. M. Morris, Sr., J. M. Morris, Jr., and K. A. Wilsey.

WHEN writing our advertisers please use one of your printed business letter heads or enclose your business card.

The World's Fair.

The Wooded Island is bright with roses now; both teas (hedded out this spring) and hybrid remontants are in good bloom. The main attraction is of course the rose garden in the center, but there are some scattering groups in other parts, among them a group of standards and bush plants (budded) from W. Van Kleeff & Son, of Boskoop, Holland, and a bed of Marshall P. Wilder from Ellwanger & Barry. In the main rose garden the outer beds are mostly planted with teas and a few Bourbons, and they are blooming very freely. Bon Silene, Perle des Jardins, Meteor and Innocente Pirola are a mass of bloom. Mme. Caroline Kuster is fine, covered with bloom, and Louis Philippe, though perhaps inferior to Agrippina, is sufficiently free in flowering to make a good show.

At time of writing the beds are not yet fully labelled with the names of exhibitors, but the best display to be seen there was that of Alex Dickson & Son, Newtownards, Ireland. The plants were in fine bloom, the best show being made by Baroness Rothschild and Merveille de Lyon. The new Margaret Dickson did not show to good advantage; in fact the few blooms noted were distinctly inferior to Merveille de Lyon under similar circumstances. We are told, however, that some plants grown on in this country made a much better impression than those planted out directly after importation. Dickson's bed of moss roses is admirable—a mass of bloom and perfect in foliage. So far this rose garden has been absolutely free from insect pests of every description, and the flowers are left to develop in perfection. Of all the hybrid remontants on view Baroness Rothschild, Merveille de Lyon and Mabel Morrison make the best show in every exhibit where they occur. Rothschild is especially good, being thickly set with perfect blooms. There are some good Magna Charta and Jacqueminot, but nothing very striking in other sorts. The Boskoop Nursery Association makes a good rose exhibit in addition to their clematis, which occupy the center of the rose garden. Clematis Thunbergii and C. viticella venosa are now in good bloom.

The associated Dresden gardeners make a good exhibit of tea roses, which are doing very well, and also a lot of standards, which are just coming into bloom. A mass of Rosa rugosa, both red and white, makes a marked impression and also makes us wish this charming single rose had been used in the shrubbery borders. A mass of Mme. Plantier in another border shows a sheet of white; this old hybrid China is such an abundant bloomer that it makes a fine show during the comparatively short time it is in bloom. Another very abundant bloomer is Clothilde Soupert, which is displayed by J. C. Vaughan.

Outside the rose garden there is still quite a good supply of bloom, although the earlier perennials are past their best. A fine show is made where two beds are bordered with evening primrose (Œnothera Fraserii and Œ. Youngii). The plants are covered with large golden yellow blooms and the display is very noticeable. Another good show is made along the shrubbery, where purple delphinium is planted in masses. The delphiniums are flowering freely in a good many places.

Among the shrubs, now that the flowering period is over with most of them, the golden elder has a wonderfully enlivening effect, its color being as good as Golden Bedder coleus. Its companion, the variegated elder, is also in fine form.

Over in the big building a good many additions have been made and also many improvements in arrangement. In the south curtain H. A. Dreer's exhibit of ferns is a great addition. The plants are, for the most part, standard trade sorts; they are well grown and in fine order, and they are labelled with a clearness that leaves nothing to be desired. The labels are in shape a key-stone of tin, mounted on a wire standard; they are painted green and lettered in white with a distinctness plain enough for the least informed. Among the plants shown was Pteris tremula Smithiana, a handsome furcate form; P. Victoriæ and P. cretica magnifica. Davallia Fijiensis plumosa was seen in fine specimen form, a very handsome plant; D. pentaphylla was also good. There was a good variety of adiantums, aspleniums, polystichums, selaginellas, etc., and they are very well arranged in a bank, backed by palms and pandanus.

In the orchids there are some good Odontoglossum vexillarium, quite a noticeable show, but the main display is of cattleyas. A good flower spike of Cypripedium Parishii is attractive, and Sophronitis grandiflora continues to make a good show of orange scarlet. At the other end of the building the Japanese garden is now gay with irises; this exhibit is a standard attraction, and the plants used in it are flourishing finely.

Over in the greenhouses the gloxinias are showing plenty of good bloom; as soon as they are at their best they will be displayed on tables under the dome of the big building. These gloxinias were raised from seed last year, being sown May 20, '92. They were kept growing all summer, blooming in September, and the bulbs were then ripened off in November. This year the bulbs were started in the latter part of February, and kept growing in an average temperature of 70°. Care has been taken to provide them with sufficient drainage; wherever there is any difference in this, leading to soggy soil, there is pretty sure to be a perceptible difference in the vigor of the

foliage. The World's Fair plants show some very fine strains of color and marking; the plants include the three types with erect, semi-erect and drooping achimene-like flowers. Some very rich rose, cerise and crimson tints were noted among them. There are also some very fine gloxinias (two-year old bulbs) from the New York state exhibit, just coming into bloom; they will make a very rich show.

The tuberous begonias are coming into fine bloom; a great many will be used in bedding. Some are belonging to the horticultural department, while others are from the New York state exhibit.

The fancy-leaved caladiums will, before long, make a grand display. They are planted in large boxes, and will make grand clumps, including some of the showiest garden hybrids.

An oddity just coming into bloom in the New York greenhouses, west of the Horticultural Building, is Aristolochia Sturtevantii, the pelican flower. Before opening its big puckered flower is no unlike resemblance of the pendent pouch from a pelican's beak, and it is odd enough and unusual enough to attract most of us. These little greenhouses promise to be very attractive this summer.

Miscellaneous Seasonable Hints.

Don't forget, even if it's late, to plant out a few of every plant for stock. It takes time and is not agreeable to have to run around among your neighbors and ask for a few cuttings of the stock you forgot to keep yourself. I allude to such plants as salvia, feverfew, ageratum, achyranthus and many such plants that you only need a half dozen of to give you all you want in the fall. Things like geraniums you are not likely to forget, because of those you want hundreds planted out if you want thousands to sell the coming spring.

Heliotropes lift badly and a few dozen should be potted into 5-inch pots and plunged outside for the summer months. You ought to spare a piece of bench at the warmest end of the carnation house or coolest end of the rose house and plant them on the bench in October. The flowers you cut from them pay well during the winter and you get all the cuttings you want.

The fuchsias you selected to keep for stock should be given liberal sized pots and grown along indoors till September 1, when they can be placed outside in the shade and gradually dried off. By October 1 the wood will be getting ripe and they can be given another month's rest without any water, under a light bench. About November 1 shake them out, cut back the longest shoots and start them going again. The cuttings from plants treated in this way will be far more vigorous than from those kept continually growing. And the latter are too precocious, wanting to flower when they are a few inches high. They may be useful for bedding plants in a shady place, but a well grown fuchsia should be two feet high and well branched before it shows a tendency to flower. Such plants are seldom seen in a commercial place nowadays, but the writer has grown them and sold hundreds of them for $1.50 each.

A plant that has been used for several years for subtropical gardening has proved a great acquisition for veranda boxes and vases; it is the acalypha. There are several varieties or species. The broad leaved varieties are the most effective. They have all the beautiful coloring of the coleus and do not grow so rampant and starve everything near them as the coleus do, and need no continued pinching. To get up a good stock, keep them under glass with plenty of heat and moisture and propagate the young shoots as fast as they are made. They propagate now as well as at any time.

Another plant that adds greatly to the appearance of vases, etc., is Grevillea robusta (the New Zealand silk oak). Its finely cut foliage is entirely different from the general run of plants used for such purposes, and, by the bye, it is a most useful plant for mantel decoration, and it comes home smiling every time, even after a night's experience in a warm gas lighted drawing room. If sown early in spring and kept continually growing all summer they will make useful plants for decorating the following winter and splendid plants in the spring for outside work. The temperature of an ordinary greenhouse suits them in winter.

There is an unusual demand this year for large jars, boxes and vases filled entirely with a good pink geranium and a semi-double pink ivy leaf geranium, and this is a taste that has come to stay I am pretty sure, so be prepared for it and plant out plenty of the ivy leaf as well as the beautiful Emile de Girardin geranium, which is about the best of the pinks, either for boxes or bedding.

Don't get rid of your extra help, which you needed during the spring rush, till you have rolled up a good big compost pile. Large rose growers don't neglect this important part of their business, but the ordinary florist does. He will pay out hundreds, perhaps thousands, of dollars to keep his plants warm, but when it comes to that great essential, a good soil pile, he scrimps it terribly, and early spring, before soil can be procured from outside fit to use, finds many of us running round ready to give most any price for a few loads of good dry potting soil. Get it at once and have it piled up in layers with one-fourth or fifth of half rotten cow manure. After the pile is complete thoroughly soak it with water and in early fall chop it down and throw into a long, high ridge. Take in what you want for winter use and cover the rest with boards or sash to keep off the rain, unless you have what is better, a covered shed, for it. WM. SCOTT.

Buffalo, N. Y., June 26.

Hardy Plants.

The past winter having been an unusually severe one it would seem that any plant that came through safely might be considered iron-clad. And as the climate at Chicago is particularly trying we believe the following list of plants that came through the winter in first class condition in the garden of hardy plants at Lincoln Park, Chicago, will be of some little interest. The large number of plants that did come through the winter safely is a source of surprise to Superintendent Pettigrew, who had anticipated a much greater percentage of loss. Following are the plants that passed the trying winter safely:

Achillea tomentosa.
Achillea The Pearl.
Acorus Japonica variegata. This is a variegated form of the sweet flag and is a fine thing.
Anemone Pennsylvanica. This is a native plant and is excellent for positions under trees and shrubs.
Aquilegias (12 varieties).
Asters (20 species).
Boltonia latisquama (a very striking thing).
Clematises. (None of the plants here have been troubled by the disease).
Delphiniums.
Doronicum Clusii.
Doronicum plantagineum.
Erigerons.
Eryngium amethystinum.
Eulalias Japonica, univittata and angustifolia.
Funkias (5 species including the variegated foliaged sort, F. larcifolia undulata variegata.)
Helianthuses (15 to 20 varieties).
Heracleum eminens (the blunt lobed cow parsnip.) This vigorous growing plant adds quite a striking effect in groups of bold growing plants.
Iberis (the shrubby candytuft).
Irises Germanica and Japonica.
Lilium tigrinum.
Lychnis Haageana.
Narcissi (including bicolor and Horsfieldii).
Œnotheras Drummondii and Fraserii.
Pachysandra terminalis. This is excellent to grow under shrubbery. It is a native and evergreen.
Papaver nudicaule (the Iceland poppy).
Paulownia imperialis. Killed to the ground, but all came up.
Phloxes (50 varieties).
Platycodon grandiflorum.
Primula auricula (it is very unusual for this to come through the winter in good condition here).
Pyrethrums (the hybrid double flowering sorts—varieties of P. roseum).
Pyrethrum uliginosum.
Rudbeckias.
Spiræas.
Statice.
Stenactis speciosum.
Stokesia cyanea.

Of the plants that were seriously damaged, Anemone Japonica suffered sadly, fully 85% of the plants being killed.

Of the gaillardias 75% was lost.

Geums were badly injured.

Hollyhocks were all killed.

Potentillas suffered severely.

Tritomas (uvaria) were nearly all killed.

Among plants new to the garden, Mr. Pettigrew is very much taken with Heuchera sanguinea, and it certainly is a very striking thing.

A curious thing about Phlox subulata was that its season of blooming was this year very much shorter than usual.

Phlox bifida, which is found growing wild in this vicinity, is a plant that should have more attention. The flowers are lighter in color than subulata, but ordinarily its season of blooming is shorter. But when in bloom it is charming. Mr. Thorpe used it to border a number of beds in the rose garden at the World's Fair, and while in bloom it was the attraction of the island.

Hydrangeas.

The hydrangea is one of the indispensable Easter flowers and is placed second only to the lily. As a money getter for the grower it is, when well done, one of his best plants, while the decorator finds better returns in this than in any other blooming plant he can buy.

But as all is not gold that glitters, neither are all hydrangeas handled with profit. To insure satisfactory results they must be well grown, the stems clothed with luxuriant foliage, having a goodly number of large blossoms with broad petals, and last and most important of all, the color must be just right. More plants remain on the benches unsold on account of their poor color than from any other cause.

YEAR-OLD HYDRANGEA AS GROWN BY MR GEO. ANDERSON.

There are not many growers who have had as few failures or who produce these plants so uniformly good as George Anderson of Philadelphia. From being originally a grower of bedding plants his attention is now entirely given up to forcing roses for cut flowers, with the exception of hydrangeas and a few lilies for Easter. His success with this plant led us to call on him for some pointers, and he very willingly explained his methods of cultivation.

Said he: "It's no trouble to grow hydrangeas; they flourish like weeds here with us; they get plenty of heat when being forced and never suffer for want of water."

"What varieties do you grow?"

"Nothing but Otaksa; we like it the best; it makes a larger flower and comes such a fine color."

"When do you take cuttings?"

"Some time in February. We get our cuttings from two-year old plants, setting a few aside that are left over from the previous season for this purpose. After they are rooted we pot into 2½-inch pots and from these into 4-inch. As soon as the weather permits they are set outside in an open frame, where they get all the sun possiible."

"When do you top them?"

"Shortly after being put outside we pinch them back, leaving about eight leaves. The buds at the base of these leaves soon begin to swell and then they must have plenty of room. When the pots become well filled with roots we pot into sixes, using good compost, and they are not shifted again until ready for forcing."

"Do you ever give them manure water?"

"No, but we plunge the pots during the summer in manure to keep them from drying out."

"You have used spent or refuse hops for this purpose, have you not?"

"Yes, and some growers still use this material, but I believe it is bad. Hydrangeas make a rank, strong growth when plunged in hops, but I think there is an acid or something used no doubt in the process of brewing, and that constant watering carries this into the soil and it finds its way into the constitution of the plant and eventually changes the color of the flower. The color of the hydrangea is often affected by the soil in which it is grown, and as I want my stock to be as near pink as possible, I try to avoid all injurious coloring matter."

"Ever try to make them come blue?"

"No, I see too many failures with others who are experimenting in this direction; after the second season they may be successful, but with one year old plants it is very difficult to change the color, other than to spoil it. There is one here though that fell down back of the table and lay there about a month before it was noticed and you see it would pass for a blue on a cloudy day. No, I don't think there is much in blue ones, even if we could get them to come with any certainty. It is that beautiful pink shade that shows in a well grown plant that sells the best.

"Along in the fall, when they seem to have made their growth, we dry them off so as to get the wood thoroughly ripened, but we are careful not to let them shrivel. If the wood gets well ripened they will stand quite a lot of freezing; in fact we like them to get a little frost before they are put inside, which we do after the chrysanthemums are cut out the latter part of November. They are kept in this house until about the first of January, when they are potted into 8-inch pots and given heat, about 50° at first, and as they grow the temperature is increased up to 80°, and they will stand 90° if necessary to get them in in time. About the first of February we put those we intend blooming for Easter into one of the hybrid houses from which a crop of flowers had been taken, where they get plenty of room, and force them on into flower. It is best not to have them too soon, as they lose vitality if they have to be held any length of time after they are ready for sale, and will soon drop the petals when put into the store or after they are sold."

"You find one year time enough in which to get up a salable plant?"

"Yes, plenty. I don't like to handle two year old plants; they never come as fine a color. I think repeated waterings in time seems to sour the soil. A well grown hydrangea will in one year make a plant suitable for an 8-inch pot, and that size is most in demand with me."

The engraving is from a photograph of a one year old plant grown by Mr. Anderson. K.

Solid Beds vs. Raised Benches.

ED. A. F.:—In your issue of June 22, page 1197, under the heading of "Miscellaneous seasonable hints," your correspondent advocates a return to the practice of planting roses in solid beds, and as he says nothing to the contrary, the presumption is that the method or manner of doing so should be the same as practiced fifteen years since. Does not the writer of the article know why that method was abandoned? It was simply from necessity, for among the many things both good and bad imported from Europe came the "Little Joker," so called. His taste was a dainty one, and not satisfied with the fully developed flower, he was wont to commence "at the root of things." Domiciled in a solid rose bed, his ravages soon destroyed the plants by feeding on the roots. The writer remembers to have seen some twelve years since a magnificent bed of Bon Silene plants which had been throwing great crops for many years utterly ruined by this enemy of the rose. From this arose the necessity of devising some means of avoiding the destruction they produced. The shallow bench was the result, and with its use growers not only found themselves better able to control the ravages of the "Joker," but they also found they could control their plants better in the winter months, and thus render it possible to put a better article on the market during those months than they had been before.

That solid beds cost far less to maintain no one will deny, and for summer and fall work they will produce an article superior to anything grown from young plants on shallow benches. Planted in the old way, however, upon solid beds, they cannot be depended upon to produce satisfactory results during December and January.

It is not generally known that a new method of solid bed planting has been adopted within the year past by a few growers, which does away in a great measure with the objection which we find to it for winter work. If it is desired to plant in a solid bed, why not try the new method introduced by Mr. John H. Taylor of Bayside, N. Y., which promises far greater success than the old? But I do not think we should be in haste to abandon a system that has served us well for

a decade. If disposed to try the new system of planting in solid beds, let us do so carefully until satisfied of its superiority. At the same time we must be absolutely sure there are no traces of the rose bug upon our premises to take possession of the new bed as soon as formed, or that we do not bring it upon the place through the purchase of plants from places where it exists.

There is no doubt in my mind but what growers of the rose will find great benefit from pursuing both methods of planting, and the wide awake ones will always be found adopting every proved method which adds to the probability of success.

M. A. HUNT.

[Mr. Taylor's plan, briefly stated, is to use sixteen inches of broken stone as a foundation for the bed. On this is placed eight inches of soil, in which the roses are planted. Three 1-inch steam pipes run through the stone foundation. Thus quick drainage and bottom heat are secured.—ED.]

Seasonable Hints.

The plants in the field will need pretty close attention. We never deemed it wise, however, to harrow the plants any more than enough to keep down the weeds. This done, the ground will have stirring enough. We use the scuffle hoe the first two or three times, which cuts out the weeds very effectually. Of course great care must be used, or the carnations will be cut out also. It is best not to hoe too close to them at first, for if much disturbed they are very likely to die, particularly in a dry time. When the plants grow longer and get a good hold of the ground we use the harrow teeth and work deeper and closer to them. Always improve the opportunity of a dry time to kill weeds. They will usually not require more than one or two hand hoeings between the rows, and this is avoided when they are planted to work both ways.

Topping will require a good deal of time and judgment. During the early part of the morning or on a cloudy day the tops can be snapped off, but when the plants become tough from the sun and dryness a knife will have to be used. Some growers trim very close to the ground, others merely nip off the ends of the flower shoots. We prefer to trim most kinds pretty close. As the shoots grow out they are again pinched back several times, varying according to the size of the plant and the lateness of the season. The idea is to have stalky bushy plants with as many flowering shoots as possible. The time to stop cutting back will depend on the variety, and at what time we wish them to bloom. No general rule can be laid down—it is more a matter of experience. Generally speaking, such varieties as bloom late, as Fred Creighton, Chester Pride and Edwardsii, should not be topped back after the first week in August or sooner. The bulk of the plants should be topped for the last time about the middle of August. There are some kinds, like Lamborn and Portia, that throw up their blooming shoots very quickly. These should be topped still later. Our plan is with all kinds not to let them bloom out in the field. Even after we stop the regular topping we pinch off the buds if too forward.

After all our care we are almost entirely dependent on the weather, and little can be done unless we have some means of irrigation when too dry. But carnations in the field are more liable to suffer from too much rain than too little moisture. Against excessive wet we have no remedy but the partial one of thorough drainage. Our ideal carnation field should be well drained and so situated that it could be irrigated when necessary.

Avondale, Pa. W. R. SHELMIRE.

Hanging Baskets.

The accompanying engraving is from a photograph of a group of four hanging baskets filled by Mr. Wm. Scott, Buffalo, N. Y. The baskets had been filled one week when photographed. When the plants have made good growth and the baskets are looking their best we shall have new photographs made and publish engravings from them, believing that the comparison will be of much interest.

Some very interesting notes on filling and caring for hanging baskets will be found in Mr. Scott's "Miscellaneous seasonable hints" on page 1027 of our issue for May 4 last (No. 257).

New York.

There is an enormous supply of indoor roses coming in, far greater than has been the case in previous years at this season. This may be caused by the growers holding their old plants in the benches till a later date than usual before throwing them out and replanting, but is ascribed by some to the fact that there is an increasing tendency to grow roses specially for summer trade. If the latter is the case it is not likely that anybody will realize much on summer roses this year. The demand for such stock has undoubtedly increased greatly in recent years and will probably increase still further, but still there is a limit to the possibilities of this summer trade, and if all go into it at once simply because they see their neighbors doing it there will be nothing in it for anybody. The quality of the stock averages very poor as a rule, and the prices realized are pretty low. Outdoor roses are a thing of the past, so they do not interfere in any way.

There is too much stock being cut of everything. Carnations are overstocked and lily of the valley is in very light demand. Sweet peas sell as low as a cent a bunch, that is the pink varieties. White are not so plenty and they bring four to five cents a bunch. In general it may be said that business is dead as far as cut flowers are concerned.

The supply men are also in the midst of the dull season, but are actively making plans for the fall campaign and seem hopeful of a good season. They say that goods have been purchased cautiously and in quantities limited to the demands of immediate trade, and that the florists all over the country are well cleaned out of stock. This means good buying of fresh goods next fall, and consequently prosperity for the supply men. There is some talk of tardy collections this spring, but no one seems to be much worried over the final outcome. These indications of confidence are gratifying.

D. H. Roberts, the "glass man," is an example of the truth of the old saying that "it's an ill wind that blows nobody good." The great destruction of glass by hail in western Pennsylvania has proved a boon for him. Telegrams are coming in from all the stricken localities, among others from the Schenley Park and Pittsburg parks greenhouses to replace the broken glass. He says it was a lucky thing that he had been advertising in the FLORIST, as it was through this agency that the boys knew of him.

There is no doubt now of the success of the plans for a great chrysanthemum show at the Grand Central Palace next fall. Contracts are all made out and will undoubtedly be signed and delivered by the time this note is in print.

Mr. Winfried Rolker will sail for Europe early in July and expects to return in time for the St. Louis convention.

Mr. F. Sander and wife will return to England per steamer Campania on Saturday, July 1.

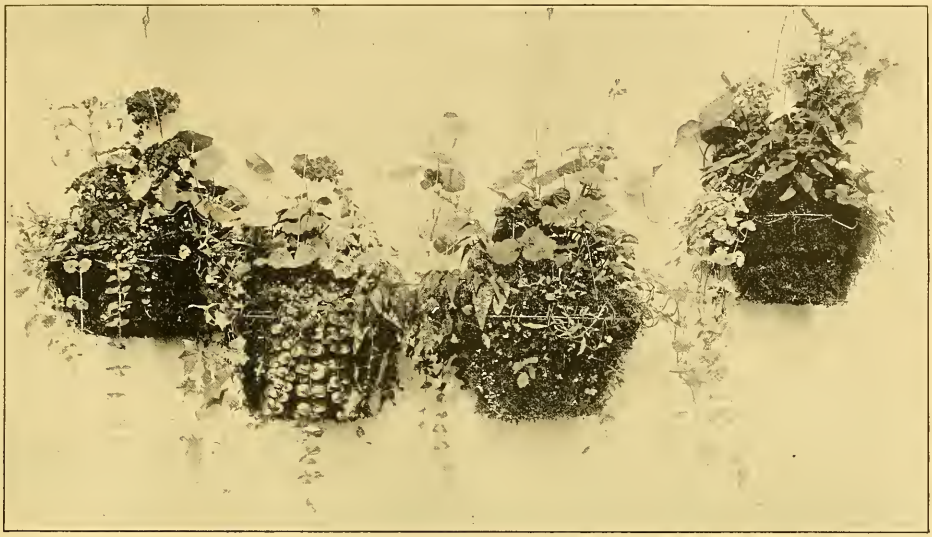
Philadelphia.

The regular monthly meeting of the Pennsylvania Horticultural Society was held last week at St. George's Hall. Immediately after the fire the trustees of this building kindly offered the use of a large room to the society for its meetings until their hall could be rebuilt, which generous offer was accepted by the society and the regular meetings will be held here until their own building is completed.

The library committee reported that the books damaged by water had been dried out and rebound, and that a room had been rented over Pennock Brothers' store in which the books were stored for the present.

The preparation of the premium list for next year's spring exhibition created considerable discussion. Some members seemed to think that as the spring show had always failed to pay it should be dropped for a time, so as to give the society a chance to catch up. Mr. Watson was very much opposed to the discontinuance of the spring shows. This society was not organized for the purpose of making money, its object is to advance horticulture. What is wanted is more shows, one every month if possible. As a society we should endeavor in every possible way to disseminate horticultural knowledge. We should make our shows worthy of the patronage of the public; there must be more novelty, more new features, new plants. The spring exhibition could be made just as attractive as the fall show and should not be dropped from the schedule. Mr. Cartledge thought the spring show should be postponed, as it was uncertain about the hall. Mr. Farson said that every effort should be put forth now to keep up the exhibitions, as from what people had said to him a great many thought the society was about done for. We should show them that a little thing like this did not bother us. The society could not afford to retrograde and the exhibitions should be finer than ever. Dr. Gadsen, one of the trustees of St. George's Hall, said not to let the matter of the hall trouble them, as he could offer them the use of their large main room, about half as large as horticultural hall, for their use at a mere nominal sum. Mr. Michell thought it would be well to hold the spring show later and make a rose show of it. Consideration was finally postponed until the next meeting.

The July meeting of the Florists' Club will be held at the corner of Broad and Filbert. The essayist of the evening will be John Walker, who will tell all about his trip to Europe.



HANGING BASKETS.

The two center baskets are twelve inches in diameter. The two outside ones ten inches. The baskets are wire, lined with green moss. Filled one week

Mr. Harris is glazing and putting the finishing touches on his new range of glass, consisting of six houses, each 100x20. In two of these he has made a new departure, glazing them with finest quality of mirror plate glass in sheets 18 by 24, ⅜ of an inch thick. This glass had to be imported from France, as no one here would contract to supply such a quantity and insure the quality. It is the quality of the glass that Mr. Harris deems important. He thinks that in these two houses he can grow plants just as well as they do out of doors without danger of burning through imperfect glass. It is rather an expensive experiment, as the plate glass costs seven times as much as the best double thick. He is also using galvanized hinges with a brass rod in the middle, which he claims will last a long time. It is an idea of his own and these hinges have now been adopted by hardware men.

Business has been fair for the season, and in some quarters florists have been quite busy.

The Duke of Veragua was entertained at Wootton by Mr. Childs the past week and Pennock Bros. furnished quite a lot of flowers for the occasion. There were also several other entertainments given in his honor, at which quite a number of flowers were used.

Prices of roses are about the same as last week, but we can not say as much of the quality, which, with the exception of La France and Niphetos, is very poor. Brides are now not as good as Niphetos. Beauties too are poor and open very soon. Carnations are fair and the best bring $1. Valley sells for 4. Smilax is more plenty, 15c is asked for very good strings.

The Ensinger greenhouses were sold at sheriff's sale the past week and were bought by Charlie Thomas, a colored gentleman who belongs to the 11th street contingent and who does considerable business. He must have taken a university course at one time as his business is largely with the "Greeks."

Langford, of 13th street, another florist of color, finding the sale of flowers a little slow has gone into fireworks and has quite a display of Fourth of July roses in his window.

The boys hope to be able to get the alleys of the Caledonian Club to practice on. The new club house is completed and the alleys will be finished in a few days. K.

Boston.

Outdoor roses have been coming in by wagon loads during the past week. The quality has been none too good on either outdoor or indoor bloom. Good Mermets, Perles and Brides could be disposed of readily if they could be procured, but they are not to be found. The stores are loaded up also with big consignments of pæonies, irises, astilbe and other outdoor bloom. Carnations are very plentiful and of good quality, especially the Mrs. Fisher, which is by all odds the finest white coming to this market at the present time.

One of the handsomest things at the Arnold Arboretum just now is a splendid specimen of Pterostyrax hispidum, syn. Halesia hispida, loaded with pendent racemes of creamy white flowers. Styrax Americana is another tree which is exceedingly beautiful when in bloom, the blossoms being so pure white and so delicate in form as to be suitable for use in the finest florist work.

Mr. Dawson is greatly pleased with the results of some of his rose crosses made in the fall of 1891. Several are now blooming for the first time. One is Jacqueminot crossed with Wichuraiana, having a flower almost identical in color and form with Souvenir de la Malmaison. The foliage is thick and glossy like that of Wichuraiana, but much larger. Out of the same seed pod came a variety with the trailing habit of Wichuraiana, but with very double, deep rose colored flowers of rather small size but exceedingly abundant. These roses were spoken of very highly by Mr. W. C. Barry, of Rochester, N. Y., who visited the Arboretum a few days ago. Other notable recent visitors were Mr. C. A. Dana, of New York, Editor Stiles, of *Garden and Forest*, and Superintendent Parsons, of Central Park.

The rose and strawberry show of the Massachusetts Horticultural Society was held on June 22-23. The roses were of the usual order of excellence, the best coming from Mr. J. S. Fay, of Wood's Holl. The great desideratum in this vicinity just now is an infallible authority on varieties, judging from the variety of colors and shapes which bore the name of such common sorts as Jacqueminot and John Hopper.

Orchids from E. W. Gilmore and orchids and ericas from J. L. Gardner were very fine. Jas. Morris, gardener to Mr. Hicks Arnold, of New York, exhibited blooms of Lælia Arnoldeana, a hybrid between Lælia purpurata and Cattleya Warneri. It was raised by Sander and is notable as the only hybrid orchid which ever got a gold medal in London. The Boston verdict was a certificate of merit.

Toronto.

Owing to the intense heat barely a quorum turned up at the regular meeting of the Gardeners' and Florists' Association this week, and President Manton, taking compassion on those present, pushed the business on hand through lively and let them go home early.

A letter was read from the Lieuenant Governor of the Province offering a valuable prize for competition at the chrysanthemum show. Offers of several other prizes from prominent citizens were also received and the association, whose bank account is a little low just now, was accordingly a thankful recipient.

The circular of the Chicago Florist

Club, concerning the contest in floral arrangement, was read, re-read and discussed; finally a committee, composed of the principal city florists, was appointed. The importance of acting quickly was urged on the committee and it was then and there arranged that it should meet on Monday, the 26th inst.

The executive committee met last week and arranged for a set of essays to be read at future meetings. Mr. A. Gilchrist (now at Chicago) is down for one on "The Wooded Island." The committee also recommended the association to get up a picnic this year, and it is to be hoped that the recommendation will be acted on. On former jollifications the ladies have been left out in the cold somewhat, but of course a picnic would be nothing without them. By all means, let us keep in with the ladies. E.

Baltimore.

Hot weather and dull trade summarizes the week. Cut flowers are going slower daily, and plants are not thought of, except once in a great while, when some belated individual has made up his mind to plant out some flowers in his yard, and cruises around the greenhouses to get them cheap. And he generally succeeds, for most florists are of the opinion that any money received for bedding plants now is as good as that much found, i. e., clear profit.

More glass is going up all around the city, and no one seems to have thought of quitting, except Mr. Jno. Wiedey, whose place near Mt. Washington has been added to the already somewhat extensive glass of Messrs. Brackenridge & Co.

In the death of Mr. Ernst Hoen we lose a most enthusiastic amateur, whose advice and assistance could always be counted on in the days of the Maryland Horticultural Society, and since then by the Gardeners' Club. MACK.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—Position as foreman; first-class rose grower and propagator of florist stock of the first quality. Can make up decorations, etc. E F G, care American Florist, Chicago.

SITUATION WANTED—By a German gardener and florist; single, age 32; speaks English; in large commercial place in or near Philadelphia. Good all-round man. References if necessary. Call on or address GARDENER, 463 N. Third St., Phila., Pa.

SITUATION WANTED—As foreman in commercial place, practical and energetic, age 29, 15 years experience; well up in cut flowers and decorative plants, also first class designer and decorator; speaks English and German well; excellent testimonials. Address F. HOYLE, 330 West St., New York City.

SITUATION WANTED—Gardener of executive ability and experience in the management and propagation of all commercial requisites connected with floriculture—ornamental, the nurseries, etc.—wishes situation accordingly. Best of references. Address A Z, care American Florist, Chicago.

SITUATION WANTED—By an Austrian, age 33, single, an experienced gardener with 18 years practice; good propagator and grower in general. Can't speak much English. Private place with greenhouses preferred. Good references given on application. Please write to A. LANGER, 557 Main Street, East Orange, N. J.

FOR SALE—2,500 feet 4-inch pipes and fittings. Half price. Address MRS. GEO. WALDBAUER, Saginaw, Mich.

FOR SALE CHEAP—Florist store at 1803 Wabash Ave., Chicago, near elevated R. R. station; have other business to attend to. OLSON.

FOR SALE OR RENT—A valuable florist establishment near railroad depot, containing about 15,000 feet of glass. Apply JACOB MENDEL, Nyack, N. Y.

FOR SALE—Rider Hot Air pumping engine; cost new $500. Also tank 8x10 feet. Cause of sale, use city water now. Give us your bid. Address FLORIST, box 16, Carlstadt, N. J.

FOR SALE OR LET—Well equipped greenhouses, some 3,000 feet of glass, about half acre of land, in center of town and within easy distance of Boston and Brockton; also dwelling house and stable if desired. M. S. GAY, Stoughton, Mass.

FOR SALE—The well-known Minerva greenhouses, with all the stock and fixtures and 8,000 carnations in field. Doing a jobbing and retail trade. A bargain for a florist. Age and poor health cause for selling. Address E. MESSMORE, Minerva, Ohio.

FOR SALE—My retail florist business at 87 and 89 W. Madison street, Chicago. Completely stocked with supplies and plants. Good horses, wagon and every thing that a first-class store needs. 42 ft. frontage of large show glass. This is no run-down business but one of the best paying in this city. Cause for selling, too much other business. Apply to T. J. CORBREY, 45 Lake St., Florists' Exchange.

FOR SALE CHEAP—Four second-hand boilers, with grate bars, front, etc., complete. 1 steam fire-box boiler, size 7½ ft. long, 3 ft. in diameter, 18 3-in. flues. Original cost $220; price $75. 1 Saddle boiler, hot water, size 9 ft. long, diameter 34 inches, 25 3-in. flues. Original cost $230; price $75. 1 hot water, size 5 ft. long, 2 ft. in diameter, with 24 3-in. flues, (a great heater); price $40. 1 hot water, size 5 ft. long, 26 inches in diameter, with 20 2½-inch flues; price $35. 5,000 ft. 4-inch water pipe in 5, 10 and 15 ft. lengths, connected with red lead packing, at 7c. a foot. 50 4-inch elbows, at 15c. each. 50 4-inch tees, 15c. each. Above boilers heated over 30,000 square feet of glass (old houses), with thermometer frequently 30 degrees below zero. Above prices f. o. b. at La Crosse. JOHN A. SALZER SEED CO., La Crosse, Wis.

WANTED—A thoroughly competent man, sober and reliable, for a general commercial greenhouse, where roses and carnations are also grown. Apply with references and wages to JOHN DOBBIN, Niagara Falls, Ont.

WANTED—For a commercial place, an experienced rose, carnation and chrysanthemum grower, with general idea of greenhouse and funeral design work. Wages $30 per month with board. Single man preferred. W. M. LOTT, Warren, Pa.

WANTED—A florist to take charge of a business in a town of about 7,000; will either pay wages, give a per cent of the profits or sell him an interest in it; a good chance for a good florist who is a hustler and is not afraid to work. Address H C, care American Florist.

WANTED—An active partner with a cash capital of $5,000 to take a half interest in a flower and seed business in a town of 35,000. The prospect can not be equalled in America. A large tract of country with numerous towns and villages is tributary. Competition as yet of no account. Particulars will be given on application to NORTH WEST FLORIST, care American Florist, Chicago.

SPLENDID OPPORTUNITY—To let on lease for eight or ten years, a large property for greenhouses in most desirable locality; extra good home market; church near by, street cars running past premises, and within twenty minutes' ride of public buildings. Address J. W. Moore, St. Vincents' Seminary, Germantown, Philadelphia, Pa.

WANTED.

Two rose and carnation growers. Address

Box 577, Peoria, Ill.

FOR SALE.

In Andover, Mass., 5 greenhouses and ⅝ acre of land. Greenhouses all stocked for next winter. Good local trade; little competition. Will be sold cheap, on easy terms. Address

BOX 372, ANDOVER, MASS.

FOR SALE OR RENT.

Owing to poor health I am compelled to dispose of my greenhouse of 2,000 feet of glass, fully stocked with choice plants, heated with hot water system; coal cheap; good soil; central location; population 3,000; no other greenhouse within 20 miles; trade good year round; through express trains between Chicago and St. Louis. A bargain for some one with a little money.

MRS. ANN C. HURD, Havana, Ill.

FOR SALE:

The well known commercial establishment of W. L. Smith, Aurora, Illinois. Plant consists of fifteen greenhouses, one, two or six acres of land. Houses all in good repair and splendidly stocked. Immediate possession. Address

W. L. SMITH, Aurora.

FOR SALE OR TO RENT.

The following greenhouse property, situated on the outskirts of Springfield, the City of Houses; or will sell Greenhouses, Stock and Fixtures and give ten years' lease of 2 acres land. Ten houses in all—5 houses, 10 feet wide, 65 feet long; 4 houses, 18 feet wide, 65 feet long; 1 house, 18 feet wide, 65 feet long. Steam plant! New double Florida Boiler. Stock in good condition, with a large and extra good home market. This is an opportunity in a life-time, as present owner has other interests to look after. If you are looking for a chance, apply at once to

N. D. WINTER,
5 Elm Street, SPRINGFIELD, MASS.

FOR SALE.

The entire collection of plants in a private greenhouse, including many valuable specimens and a number of large plants.

Apply to undersigned, or to the gardener at 601 N. Main street.

T. D. ROBERTSON,
ROCKFORD, ILL.

FOR SALE.

The Oldest Seed and Florists' Stand in New Orleans

on account of retiring from store business, a large selected stock and good patronage from the best class of customers in the city. Address

R. E. SIMONS,
NEW ORLEANS, LA.

FOR SALE.

We offer our greenhouses and label business for sale, including the land on which the greenhouses stand. For information, inquire at the office of

H. W. WILLIAMS & SONS,
BATAVIA, ILL.

Greenhouses

— AT —

AUCTION.

READVILLE, MASS., JULY 6,

10:30 A. M.

Greenhouses, sash, glass, boilers, pipe (several sizes), pots, pumps, brick, frames and rose bushes. Several hundred feet of complete houses. Lots, as far as may be, to suit bidders. Property must be removed within one month, to make room for dwelling houses. Sale on the premises lately known as the Lyman Davenport place, near Paul's Bridge.

Terms cash. Apply to

FELIX RACKEMANN,
23 Court Street, BOSTON, MASS.

The Grand New Forcing Rose,

"American Belle."

Prices and full particulars on application.
John Burton, Chestnut Hill, Philadelphia

ROSES.

BRIDES, MERMETS, PERLES, LA FRANCE, ALBANYS.

Clean stock from 3-inch pots at $7.00 per 100.
2-inch LA FRANCE and ALBANY, $4.00 per 100

ROBERT F. TESSON,
West Forest Park, ST. LOUIS, MO.

CATALOGUE PRINTING. ELECTROTYPING.

Done with expert ability for Florists Nurserymen, Seedsmen. Write to

J. Horace McFarland Co.,
HARRISBURG, PA.

BRIDESMAID.

Fine 3-inch plants at $9.00 per 100. Planters need have no fear of this rose sharing the fate of Waban, as it has proved itself a first-class rose. Some of the larger growers are planting it freely.

Meteor, Perle, Sunset, Gontier, Mermet, Bride, Hoste, and other forcing Roses now ready for planting, from 3-inch pots at usual prices.

M. A. HUNT, Terre Haute, Ind.

Some nice

WATTEVILLE

and

BRIDESMAID

plants left.

Please write, stating how many you want, and I will quote you a bargain.

FRANK L. MOORE,

. . . CHATHAM, NEW JERSEY.

HEADQUARTERS FOR

G. SOUPERT

Finest stock ever sent out.

2 -inch	per 100	$4.00
2½-inch	"	5.00
3 -inch	"	7.00
3¼ inch	"	10.00
4 -inch	"	12.00

OTHER FORCING ROSES.

FIRST ROMANS JULY 10 **J. G. VAUGHAN,**

CHICAGO

VAUGHAN'S STRAIN ON PANSY SEED IS A WORLD BEATER.

ROSES

All the leading and popular kinds for winter blooming, in 3-inch and 4-inch pots. . . .

SEND FOR PRICES.

Edwin Lonsdale,

WYNDMOOR, near Chestnut Hill,

PHILADELPHIA.

ROSES,

STRONG PLANTS,

WRITE FOR PRICES.

Kemble Floral Co.,

OSKALOOSA, IOWA.

Always mention the AMERCAN FLORIST when writing to advertisers.

ROSES. ROSES. ROSES.

2½ AND 3-INCH POTS.

Waban, Queen Scarlet, Jacks, Celine Forrester, Mme. Schwaller, Coquette de Lyon, Souv. d'un Ami, Dr. Raymond, Bougere, Marie Guillot, Comtesse Riza du Parc, Jos. Schwartz, Appoline, Mme. Lambert, C. Soupert, M. Niel, La France, Climbing Perle.

——ALL IN 2½-INCH POTS.——

La France, Papa Gontiers, J. Laings, Jacks, Perles.

——IN 3-INCH POTS.——

Write for further informaion.

La Roche & Stahl

PHILADELPHIA, PA.

30,000 FIRST QUALITY FORCING ROSES.

READY FOR IMMEDIATE PLANTING.

Fully equal to those sold last year, and perfectly healthy in every respect.

LA FRANCE, AMERICAN BEAUTY, 3-inch pots, $9.00 per hundred; 4-inch pots, $12.00 per hundred.

SOUV. DE WOOTTON, MERMET, BON SILENE, MME. HOSTE, PERLE DES JARDINS, BRIDE, SAFRANO, MME. CUSIN, 3-inch pots, $7.00 per 100; 4-inch pots, $10.00 per 100.

SMILAX. Strong plants, 2½-inch pots, $2.50 per hundred; $20.00 per thousand.

J. L. DILLON, Bloomsburg, Pa.

FORCING ROSES.

Good Stock——● . . . 3 AND 4-INCH POTS.

AMERICAN BEAUTY, BRIDE, MERMET, BRIDESMAID, METEOR, PERLE, SUNSET, GONTIER, LA FRANCE. . . . . .

A. S. MacBEAN, Lakewood, New Jersey.

ROSES.

TEAS	$30.00 per 1000
HYBRIDS	40.00 per 1000

Healthy plants, in 2-inch pots.

Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.

Trade list on application.

Jacob Schulz,

LOUISVILLE, KY.

ROSES.

PERLES, 2¼ inch, $5.00 per 100.

PERLES, 2¼ inch, $45.00 per 1,000.

JOHN BURTON,

Chestnut Hill, PHILADELPHIA, PA.

SEND FOR A COPY

——OF OUR——

TRADE DIRECTORY

AMERICAN FLORIST CO., CHICAGO

ROSES.

Fine healthy stock. Per 100 P. 1000

Perles, Mermets, The Bride, Sunset, Papa Gontier, Niphetos, Bon silene, La France, Souv. d'un Ami, Duchess of Albany, Mad. Cusin, Mad. de Watteville	5.00	45.00
Geraniums, double and single, fine assortment of varieties from 2½ inch pots	4.00	35.00
From 3½ inch pots	8.00	

Lots of other Fine Stock.

Send for new list.

WOOD BROTHERS,

Fishkill, N. Y.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST. . . . . .

ANCHORAGE ROSE CO., Anchorage, Ky.

WHEN writing our advertisers please use one of your printed business letter heads or enclose your business card.

Chicago.

At the last meeting of the Florists' Club no business was transacted, as the attendance was not sufficient to make a quorum.

The flower market is in rather a lifeless condition; there has been little business for a week past. Stock is plentiful and much of it very poor. Roses are generally suffering from mildew, and the flowers are flimsy in texture. Perles and Niphetos are about the best. Beauties are fairly good, but open out very quickly. There is still a glut of carnations, which are, however, very good in quality. Valley from cold storage is in, but is generally of mediocre quality. The main stock of outside pæonies is over, but retarded pæonies are expected to come in for a month yet. Sweet peas are exceedingly plentiful and have dropped greatly in price. Among outside stuff quite a lot of campanulas are seen, the dark purple predominating, but the white is preferred. These flowers are sold for fifty cents a bunch and are showy for the window. Outside Jacqs are good and sell well; in fact they are about the only outside rose there is sale for. A great many small irises are in, but they are almost unsalable.

Among recent visitors were J. M. Jordan, St. Louis; G. Probst, Kansas City; Lyle Waterbury, University Park, Colo.; L. M. Noe, Madison, N. J.; Mrs. John Reading; A. Koenemann, of Goos & Koenemann, Nieder-Walluf, Germany; A. M. Herr, Lancaster, Pa.; D. B. Long, Buffalo, N. Y.

SHELBURNE, VT.—There has been a great hail storm along the shore of Lake Champlain, and Dr. Seward Webb's conservatories at this place are badly damaged, about four thousand lights of glass being broken.

ZIRNGIEBEL'S Giant Market and Giant Fancy PANSIES,

are without question the most popular strains in cultivation up to date.

New Seed ready now, in trade packages of either strain, at one dollar each.

Denys Zirngiebel,
NEEDHAM, MASS.

SMILAX

FOR WESTERN FLORISTS.

A few thousand **extra strong** 2-inch Smilax plants at $2.25 per hundred. Cash with the order.

BYRON H. IVES,
ALBUQUERQUE, NEW MEXICO.

Asparagus Plumosus Nanus,

from 4-inch pots, fine stock.

Per hundred ..... $ 32.50
Per thousand 300.00

50 at 100 rate, 250 at 1000 rate.

1000 SMILAX to spare, from 2½-inch pots, at $2.00 per 100; $18.00 per 1000.

THEO. BOCK,
Miami Street, HAMILTON, OHIO.

CHEAP PLANTS.

Coleus, 2-inch pots, our selection, $1.00 per 100.
Water Hyacinths, 25 cents per dozen; $1.50 per 100.
Parrot's Feather, 25 cents per dozen; $1.50 per 100
Water Poppy, 25 cents per dozen; $1.50 per 100.
Mrs N. E. Westgate & Son, Houston, Texas.

Ampelopsis Veitchii.

SPECIAL low rate to dispose of a surplus of Ten Thousand fine, strong plants in 4-inch pots.

$8 00 PER 100; $75.00 PER 1000; $200 00 FOR 3000.

These vines are healthy, well grown, and true stock. This offer will hold good until the Fourth of July, after which add one-half to above price.

LANGAN BROS., 921 Crescent Street, ASTORIA, L. I., N. Y.
Mention American Florist.

PANSIES.

THE BEST ARE THE CHEAPEST.

SIZE is a strong point in Pansies; when you combine size, color, substance and form they are pretty near right. By careful hybridization and selection I have accomplished this, and the Pansies I send out this Fall will be an agreeable surprise, even to former customers. If you buy Pansies I would be pleased to correspond with you; they will be offered for sale from Aug. 20th to Dec. 1st, at 75c. per 100 or $5 per 1000. Terms cash with order or C. O. D. No seed for sale.

L. B. 496. ALBERT M. HERR, LANCASTER, PA.

You Must be Thinking

Now about the pot-grown Strawberry Plants you will need for your trade this summer. We will have them in leading varieties after July 1, at $18.00 per 1000. $15.00 in large orders. We can ship at once. NO WAITING.

Rogers' Nurseries, Oldest in the State Moorestown, N. J.

FILL UP HOUSES FOR SUMMER.

Fine young plants, potted now, will be worth many times the money by autumn.

ALL EXTRA STRONG.

PALMS.	Per 100
Latania Borbonica, 2 inch pots,	$ 5.00
Cocos Plumosa, or Weddelliana, 2 inch pots	10.00
Cocos Weddelliana, 3 inch pots	20.00
Areca Baueri, 3 inch pots	10.00
Cocos Plumosa and Weddelliana, strong, from seed boxes	5.00
Caryota Urens, 4 inch pots	20.00
ORNAMENTAL FOLIAGE.	
Dracæna Terminalis, 2 inch pots	6.00
Dracæna, 20 finest sorts, 2 inch pots	10.00
Ornamental Foliage, 25 beautiful varieties, 2 and 3 inch pots	10.00
Crotons, 20 very fine sorts, 3 inch pots	15 00
Caladiums, 20 very fine sorts, 2 inch pots	10.00
Pandanus Utilis, 4 inch pots	25.00
Musa Ensete, 4 inch pots	20 00
FLOWERING PLANTS.	
Citrus Otahitiensis, 2 inch	10.00
" " extra, in 5 inch	25.00
Achimenes, 6 fine colors, mxd, 5 in. pots, full	25.00
Wistaria Chinensis, 2 inch	5.00

JOHN H. LEY,
ANACOSTIA, D. C.
Mention American Florist.

PANSY SEED. PANSY

The Jennings strain of large flowering and Fancy Pansies, new crop now ready, 3 pounds of seed and over 500,000 plants were sold last season. This strain is popular, and why? Because Florists can depend on getting only First Class Stock. I shall sell no other. My aim is to supply the best Finest Mixed, all colors, trade pkt. 300 seeds 25c.; 1000 seeds 50c.; 2000 seeds $1.00; per ounce $6.00. Pure White (the finest) trade pkt 50c. and $1.00; Golden Yellow, dark eye, trade pkt. 50c. and $1.00. Send for price list for other varieties. Pansy Plants, ready September 1 to December 25, any size wanted, cold frame size 65c. per 100 by mail; $5.00 per 1000 by express; 5,000 $20. Large flowering plants $1.00 per 100; $8.00 per 1000 Cash with order.

ADDRESS E. B. JENNINGS,
WHOLESALE PANSY GROWER,
Lock box 254 SOUTHPORT, CONN.

ROEMER'S SUPERB PRIZE PANSIES

The finest strain of Pansies in the World.

Introducer and Grower of all the leading Novelties.

Catalogue free on application.

FRED ROEMER, SEED GROWER,
QUEDLINBURG, GERMANY.

PYRETHRUM ULIGINOSUM. (Hardy.)

The Daisy that blooms in the Fall. Plants in 3-inch pots, $3.00 per 100.

CHRYSANTHEMUMS.

All the leading kinds for cut flowers: in thumb pots, $3.00 per 100; $25.00 per 1000. My selection.

EDWIN LONSDALE,
WYNDMOOR Station: Chestnut Hill P. O., PHILA.
on Phila. & Reading R. R. from 12th & Market Sts.

Cyclamens.

	Doz.	Hundred
Select strains, in 3½-in pots	$1.00	$8.00
H. P. Roses. Select named kinds	1.50	10.00
Smilax, stocky, well-hardened Seedlings, per thousand,	6.00	.75

F. A. BALLER,
BLOOMINGTON, ILL.

CHRYSANTHEMUMS.

2½ inch, $4 per 100.

SMILAX—1st class, from 2½ inch pots, $2.50 per 100; $20.00 per 1,000. Samples free.

Address J. G. Burrow,
FISHKILL, N. Y.

PANSIES.

During the season we shall have plants of best German strain of Pansies, at lowest prices.

BRAUER & RICHTER,
McCONNELSVILLE, OHIO.

100,000 SMILAX PLANTS.

From 2-inch pots, for June delivery, at $2 per 100; $15 per 1000. Terms strictly cash. Orders booked now. Address

FRED SCHNEIDER, Wholesale Florist,
WYOMING CO., ATTICA, N. Y.

CHICAGO.

My Catalogue for the American trade being now ready, copies can be had at my exhibit at the World's Fair, or from my address.

OSCAR TIEFENTHAL,
Wandsbeck, Hamburg, Germany.

Special Offer

FOR THE NEXT THIRTY DAYS.

LATANIA BORBONICA.
5-inch pots, strong, per doz., $9.00,
4-inch " " " $6.00.
3-inch " " " $2.00; per 100, $15.00.
2½-inch pots, strong, per doz., $1.00; per 100, $8.00.

PTERIS SERRULATA.
3-inch pots, $1.00 per doz.; $7.00 per 100.

ARECA LUTESCENS, 2½-in. pots per 100 $10.

ASPARAGUS TENUISSIMUS.
3-in. pots, per doz., $1.00; per 100, $8.00.
2½-in. pots, per doz., 50c; per 100, $4.00.

CYPERUS ALTERNIFOLIUS.
4-inch pots, per doz., $1.25.
3-inch pots, per doz., 75c.
2-inch pots, per doz., 50c.

Address **NATHAN SMITH & SON,**
167 W. Maumee St.,
ADRIAN MICH.

"CHRYS-COLA."

COLEUS.

Verschaffeltii, Golden Verschaffeltii, Hero, Yeddo, Firebrand, Firecrest, J. Goode, Chicago Bedder. Plants from 2¼ and 2-inch pots.

$1.50 per 100; $12.50 per 1000.

—CASH WITH ORDER.—

☞If order cannot be filled, will notify by wire.

S. B. FIELD,
ROSELLE, N. J.

Association "Flora"

BOSKOOP, HOLLAND

NURSERIES.

Roses, Clematis, Shrubs, Azaleas, Palms, Herbaceous Plants, Bulbs, Etc.

Catalogue on Application.

P. OUWERKERK,
206 Cambridge Ave., JERSEY CITY, N. J.

Swainsona galegifolia alba.

Nice young plants in 2¼in. pots, $3.00 per dozen. **STOCK LIMITED.**

EDWIN LONSDALE,
WYNDMOOR, near Chestnut Hill, PHILADELPHIA.
Money Order Office, Station "G," Phila.

Cycas Revoluta

The Largest and Best Selected Stock of Cycas Revoluta, fronds and roots cut off, true long leaved variety, now on hand.

For general Japanese and Australian stock, apply to

F. GONZALEZ & CO.,
303-312 Wayne St., SAN FRANCISCO, CAL.
☞Send for catalogue

EXTRA PANSY SEED.

Mammoth Sunbeam Strain.

A grand collection of giant flowering varieties, very large, of perfect form, and choice colors; carefully selected; receive high praise from my customers; better than ever; no finer strain offered anywhere. Every florist should sow of it. Trade pkt., 500 seeds, 25 cts.; 3 pkts. 60 cts.; 6 pkts. $1.00.

JOHN F. RUPP, Shiremanstown, Pa.

IMPORTED ORCHIDS.

Cattleya Mossiæ just arrived in splendid condition. **East Indian Orchids** have arrived. Among them will be a grand lot of **Vanda Cœrulea, Cypripedium Insigne,** collected in the original district from which all the choicest varieties have come, **Cymbidium Eburneum, C. Mastersii, C. Devonianum, C. Giganteum.** Also **Dendrobium Nobile, D. Farmersii, D. Chrysotoxum, D. Thyrsiflorum, D. Aureum, D. Densiflorum, D. Devonianum, D. Cambridgeanum** and other **Dendrobes,** together with a small lot of **Phajus Wallichii** and **Pleiones.** Prices of the above on application.

Of **Established Orchids** a fine selected stock of **Cattleya Trianæ,** well established in 6-inch pots and will produce four to eight flowers each next winter. Many very choice varieties will be found among them. Single plants $2.50; 12 for $25.00; 100 for $175.00. Terms sixty days to buyers with satisfactory references, or 5 per cent discount for cash.

IG. FORSTERMAN, NEWTOWN, N. Y.

Two leading Florist Flowers:

CHRYSANTHEMUMS AND ROSES.

ALL THE NEW AND SELECTED STANDARD VARIETIES. . . . . .

My stock of all are as fine as can be produced at reasonable rates.
Complete list of these will be mailed to all applicants in the trade.

JOHN N. MAY. Summit, N. J.

Carnations All Sold

We still have some Fine Plants of

The Best Yellow Canna, **NELLIE BOWDEN,** 75c each. $8.00 per dozen

JOHN McGOWAN, - - Orange, N. J.

Siebrecht & Wadley,

ROSE HILL NURSERIES,

NEW ROCHELLE, N. Y.

Palms, ORCHIDS Roses,

and New Plants.

FRESH DRACAENA CANES NOW READY.

ORCHIDS.

The Finest Stock in the World.

SANDER'S,
ST. ALBANS,
ENGLAND.

Thirty minutes from London.

Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City.

Orchids Cheap as Good Roses.

BRACKENRIDGE & CO.,
Established 1854. **Govanstown, Md.**
PRICE LIST FREE.

1,000,000 CANE STAKES

HEADQUARTERS for WATER LILIES

Now is the time to plant all tender and tropical varieties without risk and loss. Secure your stock early. Prices moderate. Send for Catalogue.

WM. TRICKER. DONGAN HILLS, NEW YORK.

Alternanthera Aurea Nana.

Per 100	$ 2.50
Per 250	5.00
Per 1000	20.00

NATHAN SMITH & SON,
167 W. Maumee St., ADRIAN, MICH.

CARNATIONS

Rooted Cuttings all sold or planted out.

FIELD GROWN PLANTS IN SEASON.

Correspondence Solicited.

C. J. PENNOCK, THE PINES,
Chester Co., KENNETT SQUARE, PA.

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

ROOTED CUTTINGS of CARNATIONS

By the Wholesale.

Ready now. This is the best time for intending buyers to supply themselves. offer them at moderate prices. Send for Price List. Address

JOSEPH RENARD, Unionville, Chester Co., Pa.

FIELD GROWN CARNATIONS.

50,000 Ready in the Fall.

W. R. SHELMIRE,
CHESTER CO., AVONDALE, PA.
Correspondence Solicited.

CARNATIONS.

A SPECIALTY.

Full stock of all the new and leading varieties. Rooted Cuttings, Young Plants, and Field Grown Plants in season. Get our prices before purchasing.

GEO. HANCOCK,
GRAND HAVEN, MICH.

E. G. HILL & CO.,

Wholesale Florists

RICHMOND, INDIANA.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

THE PROTEST AGAINST FLORICULTURE.

Justice has leaden wings but iron hands. The very tardy recognition of floriculture in the affairs of the World's Columbian Exposition is surely an evidence of the first idea, if not the second, in the old adage. Long before the department of horticulture was organized and while it struggled headless against political jugglery and acquired deformities from which it never will recover, its best friends called and recalled the attention of those whose procrastination fatally dwarfed it, to the grand possibilities of floriculture. In vain was the fact shown by men of unquestioned patriotism and high business ability that floriculture as developed in recent years had become in the public eye an attraction second only to art or music. They showed that the increase of this branch of horticulture in the last twenty years was unprecedented, and that now in its various departments of flowers and plants it commanded the personal interest of the masses far beyond that of any other branch of horticulture, and therefore, on its merit, as well as on its availability as a money earner for the Exposition, it should be recognized as the leading industry in the department, and its representative should be the Department Chief. This wise suggestion from the best possible sources was entirely ignored, and the result has been about as bad as it could be. Nevertheless, floriculture, in spite of neglect and by virtue of its own force and true importance, has proven during all the time previous to the opening day the only money earning department of the Fair—a constant attraction.

And now comes the American Association of Nurserymen, and protests against the *undue prominence of floriculture.* Why, bless you, gentlemen, floriculture is prominent because it is to-day the greatest of all the divisions of horticulture, and though you "resolute till the cows come home," you will make no other division greater nor floriculture less.

Our Annual Convention Number.

In our Convention Number for 1893, which will also be a Columbian Souvenir as well, we shall repeat the plan of identification by portraits as inaugurated at the Convention in Washington last August. This plan solved the identification problem with such general satisfaction and was so generally made use of that we believe no explanation of its workings is now necessary.

Are you a member of the Society of American Florists? If so, do you expect to be present at the Convention in St. Louis next August? If not now a member do you expect to join while at the St. Louis meeting? If so, and you were not represented among the portraits given in our Convention Number of 1892, please send us a cabinet size photograph of yourself, being careful to write your name and address plainly on back of same. If you have no recent photograph, have one taken now, and send us a copy as soon as ready. If you intend to take your wife with you to the convention (and you ought to do so if possible) send us a copy of her photograph also, as our identification plan includes the ladies too. But do not send us photographs that must be returned. We have to cut them to get them into groups and of course the photos are spoiled thereby.

This number will contain in addition to the portraits and indexes to same, a complete guide, *at date,* to the Horticultural Department of the World's Columbian Exposition at Chicago, which will certainly be visited by all members of the Convention after the adjournment of the St. Louis meeting. Diagrams of each section of the Horticultural display will be given and the location of each exhibit plainly indicated so it may be quickly located by any one. These will be accompanied by an alphabetical index to exhibitors and a classified list of exhibits, each referring to position on the diagrams; together with fine half tone plates of special features.

Full details regarding the great Horticultural Congress will also be given in this number, and it will be such a "Columbian Souvenir" as you will want to preserve for all time.

THE ADVANCE PREMIUM LIST of the seventh annual chrysanthemum show to be given by the Society of Indiana Florists, which will be held in Indianapolis November 7-11, 1893, is now issued. Among the premiums offered are three specials for best market plants, not exceeding 7-inch pots.

THE annual meeting of the Society of Indiana Florists will be held in Fairview Park, Indianapolis, July 3. Printed copies of the program may be had on application to the secretary, W. G. Bertermann, 37 Mass. avenue, Indianapolis, Ind.

WARSAW, ILL.—A. C. Hammond, for ten years secretary of the Illinois State Horticultural Society, and secretary of the Illinois Board of Control of Horticultural Exhibit at the World's Fair, died at his home here June 20, aged 62. Mr. Hammond was prominent among horticulturists in this state.

SAN FRANCISCO.—Florist J. H. Sievers has brought suit against the city for $20,000 damages on the ground that he has been damaged to that amount by the raising of the grade of Polk street to an altitude twenty feet above its former level.

JULIUS TESMER & CO.
Manufacturers of all kinds of
Ice Boxes
AND STORE FIXTURES,
937 to 943 N. Western Ave., CHICAGO.

WHOLESALE FLORISTS
La Roche & Stahl
N. E. CORNER
13th & Chestnut Sts.,
PHILADELPHIA.

SAMUEL S. PENNOCK,
Wholesale Florist
REMOVED TO REAR OF 42 S. 16th ST.,
Philadelphia, Pa.

WISCONSIN FLOWER EXCHANGE,
131 Mason St, MILWAUKEE,
WHOLESALE
Cut Flowers AND Florists' Supplies,
BULBS, ETC.

THE SMILAX KING!
Who? KOFFMAN,
Where? WALDEN, Orange Co., N. Y.
What? SMILAX
25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.
When? ALL THE YEAR AROUND.
And he pays the Express.

HARDY CUT FERNS
LAUREL FESTOONING, ETC.
The only place in the world where you can Always get them,
H. E. Hartford,
18 Chapman Place, BOSTON, MASS.

DO YOU USE FERNS?
Finest and Cleanest in the Land.
Hardy Dagger Cut $1 per 1000.
G. W. CURREY & CO.
Give us a trial NASHVILLE, TENN.
Mention American Florist.

CUT SMILAX,
15 cts per string till November 1st. Quality first-class. Special attention to orders by wire.
J. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers

Asparagus Plumosus Nanus.
CUT STRINGS: 6 to 10 feet long, 50 cents each. 12 to 18 feet long, $1.00 each.
In large or small quantities all the year round. The largest stock in the country.
W. H. ELLIOTT, Brighton, Mass.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.

	Per 100
Perle, Gontier, Niphetos	$3.00@$4.00
Mermets, La France, Bride	4.00@ 5.00
Meteors	6.00
Carnations, short	1.00
" long	1.50
Valley, Tulips, Narcissus	2.00@ 3.00
Adiantum	1.00
Callas, Harrisii	8.00@12.00
Smilax	16.00@18 00
Peonias	6.00
Asparagus Plumosus	50 00

In effect till next issue of this paper.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
126 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.; Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange.
45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY,
Wholesale and Commission
FLORIST,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

A. G. PRINCE & CO.,
Wholesale and Commission
FLORISTS,
45 LAKE STREET,
In Chicago Cut Flower Exchange. CHICAGO.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

Wholesale Markets.

Cut Flowers.

NEW YORK, June 27.

Roses, Gontier, Perle, Niphetos	1.00@ .50
" Mermet, Bride, Hoste	1.00@ 3.00
" Cusin, Watteville, Meteor	1.00@ 2.00
" Bridesmaid, La France	2.00@ 4.00
" Testout	6.00@ 8.00
" Beauty	5.00@20.00
" Outdoor Hybrids	.25@ 1 00
Gladioli	4.00@ 6.00
Carnations	.10@ .50
Valley	1.00@ 3.00
Sweet Peas, per 100 bunches	2.00@ 5.00
Mignonette	1.00@ 2.00
Cattleyas	50.00
Adiantums	1.00
Smilax	10.00@15.00

BOSTON, June 27.

Roses, Niphetos, Gontier	1.00@ 3.00
" Perle, Sunset	2.00@ 3.00
" Bride, Mermet	2.00@ 5.00
" Jacq., Hybrids	1.00@ 4.00
Carnations	.50@ 1.50
Longiflorum	4.00@ 6.00
Lily of the valley	2.00@ 3 00
Gladioli	6.00@ 8.00
Peas	.25@ .50
Spiræa	1.00
Stocks	1.00
Adiantum	1.00
Smilax	12.00@15.00
Asparagus plumosus	50.00@100.00
Pink pond lilies	8.00@10.00

PHILADELPHIA, June 27.

Roses, Perle, Gontier, Sunset	2.00
" Niphetos, Guillot, Wootton	3.00
" La France, Bride	3.00@ 4.00
" Beauties	12.00@15.00
Carnations	.75@ 1.00
Sweet peas	.50
Valley	4.00
Smilax	15.00@20.00
Asparagus	40.00@60.00
Adiantum	1.00
Fern leaves	1.00 per M

CHICAGO, June 27.

Roses, Perles, Niphetos Gontier	3.00
" Mermet, La France, Albany	3.00@ 4.00
" Brides, Wootton	3.00@ 4.00
" Beauties	12.50@15.00
" Meteors	5.00
" Jacqs	8.00@10.00
Carnations	.75@ 1.00
" fancy	1.50
Callas, Harrisii	8.00@10.00
Gladiolus	6.00@ 8.00
Sweet Peas	.25@ .50
Peonies	3.00@ 5.00
Stocks	2.00
Coreopsis	.75
Smilax	15.00@18.00
Adiantum	1.00
Asparagus	50.00

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

WHOLESALE FLORISTS,
JOBBERS IN . . . . . FLORISTS' SUPPLIES, FLORISTS' VASES.
METS, BRIDES, GONTIERS, CARNATIONS, ALWAYS ON HAND.
1 Music Hall Place, BOSTON, MASS.
HORTICULTURAL AUCTIONEERS. . .
Mention American Florist.

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., BOSTON, MASS.
Mention American Florist.

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
THE FINEST ROSES AND CARNATIONS.
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE
FLORIST,
1122 PINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STEET,
St. Louis, Mo.

The Seed Trade.

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1893. Applications for membership should be addressed to Wm. Megatt, chairman membership committee, Wethersfield Conn.

MESSRS. D. M. FERRY & Co. have let contract for a seed warehouse and dock at Charlevoix, Mich., to cost $8,000.

NEW York.—Mr. Eugene Schaettel, representing Vilmorin, Andrieux & Co. of Paris arrived here on June 17, *en route* for the World's Fair.

VISITING CHICAGO: W. W. Harnden, Jerome B. Rice, Fred S. Plant, George Dingelsted, E. M. Haven, H. A. Johns & Bro., A. J. Brown, D. I. Bushnell.

ST. LOUIS, Mo.—The Heinrichshofen Seed Co. has been incorporated here with a capital of $12,000. Incorporators, Wm. A. and Robert Heinrichshofen and Edw. W. Kaltwasser.

Dutch Bulbs.

Under date of June 10 a Holland grower writes: "Since we wrote you about the severe drought in our district we have had some good showers of rain, and, though not everywhere, in many places they have done a great deal of good, and we still have a prospect of a good crop of bulbs, though some lots had died before rain came."

HOLYOKE, MASS.—The summer show of the Holyoke Horticultural Society was a very successful one and was attractively arranged. There was a fine show of roses.

KENT, O.—The Cemetery View Floral Co. have commenced business here with one house 20x70 for roses, etc., and show house 20x30; Geo. F. Braybon, manager. Mr. Brayhon is from Warren, O.

Write for Wholesale List.
MICHEL PLANT AND BULB CO.,
ST. LOUIS, MO.

J. W. Eldering,
CUSTOM-HOUSE BROKER and FORWARDER
78 Barclay St., New York.
Solicits the favor of your shipments for the coming season. Prompt and careful attention guaranteed. Charges reasonable.

Choice Lily of the Valley Pips.
Ernst Reimschneider, Altona, Hamburg.
For Fall Importation. Catalogues free on application to his sole agents.
C. C. ABEL & CO., P. O. Box 920, New York.

SPECIAL NOTICE.
BULBS. BULBS. BULBS.
FALL '93 DELIVERY. SOUND DELIVERY GUARANTEED.

You will run no risk of receiving your goods wholly or partly decayed. You will know to a penny what your goods will cost you, as we give you prices delivered **NET** to point of destination.

	Per 100	Per 1000
LILIUM AURATUM, 6 to 8 inches circumference	$3.50	$27.50
" " 8 to 9 " "	4.50	35.00
" " 9 to 10 " "	5.50	45.00
" " 10 to 11 " "	6.00	50.00
" " 11 to 13 " "	9.00	75 00

Send for our **New Trade List** which gives you full prices, etc., on all other Lilies, Seeds, Etc. We can ship to you from **Japan direct,** you assuming risks of shipments. Our prices and terms are as favorable as any. Figures are given in **American money**—the reason being, that although 100 gold dollars are at present date on Exchange Draft on Yokohama worth from 130 to 132 silver, fluctuating with the market, the rates may rise any day, changing basis of prices.

Send for our Price List of Bulbs, etc. FROM JAPAN DIRECT.

Freight from Yokohama to San Francisco on fast steamers is $10.00 gold, 40 cubic feet measurement, payable in advance in port of Yokohama. Average cost of freight for 1000 medium sized bulbs from Yokohama to San Francisco $6.00. From San Francisco to eastern points freight goes by weight. If shipped right through, packed in clay, 1000 medium bulbs will weigh (average) 900 pounds. By available lines freight on 100 pounds is $2.50. Custom House entry payable here. Also charges for transfer from steamers to railroad.

FROM JAPAN VIA SUEZ TO NEW YORK DIRECT.

Time of transit 75 to 90 days. Cost of freight 50 to 60 shillings per ton measurement. Fall shipments from Japan arrive New York about middle of December.

NOTE—Shipments from San Francisco on which we pay freight must cover 200 pounds weight; at least 500 bulbs. **Auratums threaten to be scarce.**

SEND EARLY ORDERS.
H. H. BERGER & CO., SAN FRANCISCO, CAL.

ONION SEED
OUR SPECIALTY.
Grown from selected Onions and the purest stock in the United States.
1893 CROP 1893
Yellow Globe Danvers, Yellow Flat Danvers, Extra Early Red, Wethersfield. | Write for Prices.
COX SEED AND PLANT CO.
SAN FRANCISCO, CAL.

J. J. MOSER,
Versailles Nurseries,
VERSAILLES, - FRANCE.
Cable Address: MOSER, VERSAILLES, FRANCE.
SPECIALTIES.
Hardy Rhododendrons, Azaleas, Kalmias, Palms, Fruit Trees, Rose Trees, Japanese Maples, Ornamental Trees, Orchids, Perennials.
Grand Choice of Extra Large Conifers.
Catalogues sent on Application.
A. MOSER, Agt.,
2223 Collage Grove Ave., CHICAGO, ILL.

Vaughan's Solid Steel Trowel.
THE BEST IN THE WORLD. NEVER WEARS OUT.
Price, 50c.; by mail, 60c.
VAUGHAN'S SEED STORE,
NEW YORK, 26 Barclay Street. CHICAGO, P. O. Box 688.

LILIUM HARRISII.
Original and largest growers of this important bulb.
OUR SPECIALTY!
True Stock. Lowest Prices. Best Quality.
F. R. PIERSON CO.,
TARRYTOWN-ON-HUDSON, NEW YORK.

FREESIA BULBS, Refracta alba, strong flowering bulbs $1.00 per 100; $9.00 per 1000. By mail postpaid.
R. MANN & SON, Lansing, Mich.

Freesia refr. alba.
READY NOW. Samples mailed free.

	Per 100	Per 1000
SELECT BULBS	$ .75	$5.00
EXTRA SELECT BULBS	1.00	8.50

W. W. BARNARD & CO.,
6 and 8 North Clark Street, CHICAGO.

We make special import prices on
ROMANS, LILIUM HARRISII, NARCISSUS, HYACINTHS, TULIPS, VALLEY PIPS, and all other FORCING BULBS. . . . . .
Let us know your wants and get our prices.

Columbia Farm,
ST. GEORGES, BERMUDA.
The undersigned solicits offers for about 100 lbs. Freesia Seed (R. alba), for the whole, or in lots of 10 lbs. Also a few early white Roman Hyacinths, Gladiolus, Calla, Chinese Sacred Lily, Amaryllis Johnsonii bulbs and Canna roots; choice varieties. June and July delivery.
H. H. JAMES,
Grower and Exporter of Bermuda Bulbs.

Helianthus Maximillianus
This noble perennial herbaceous Sunflower grows to the height of ten (10) feet in good rich soil, and blooms in the Fall, throwing grand spikes of its beautiful single flowers.
Strong plants, $1 per doz.; $6 per 100.
EDWIN LONSDALE,
WYNDMOOR, near Chestnut Hill, PHILADELPHIA.

TRY DREER'S GARDEN SEEDS,
Plants, Bulbs & Requisites. They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.
HENRY A. DREER, Philadelphia, Pa.

—Prices Further Reduced—
CAPE COD PINK POND LILY.
For price list, Plants and Cut Flowers, address the original cultivators,
Chipman Bros.,
SANDWICH (Cape Cod), MASS.

SEGERS BROTHERS

Offer HYACINTHS, TULIPS, DAFFODILS,

And all other bulbs for forcing and outdoor, in very fine quality, at reasonable rates.

If any of our friends have not received a copy of our Catalogue of 1893, should write for one at once.

Please DO NOT DELAY ordering.

SEGERS BROTHERS,

WHOLESALE BULB GROWERS,

LISSE, near Haarlem, **HOLLAND.**

HULSEBOSCH BROS., BULB AND PLANT GROWERS,

OVERVEEN, near Haarlem, HOLLAND.

	Per 100	1000
Lilium Harrisii, 4 to 5-inch in circ.	$2.20	$19.00
" " 5 to 7-inch in circ.	3.00	24.00
" " 7 to 9-inch in circ.	5.25	47.00
" " 9 to 12-inch in circ.	11.00	100.00
Lilium Longiflorum 10 per cent denser than Lilium Harrisii.		
Roman Hyacinths, extra selected	2.50	22.00
" " top roots	3.00	25.00
Narcis. Totus Albus, extra selected	1.00	7.50
" " " Grandiflor'm, ext. s'le'd	1.30	11.00

Fall Wholesale Catalogue now ready. Address

A. HULSEBOSCH,

P. O. Box 3118. Warehouse 58 West Street, NEW YORK CITY.

BENJAMIN RIMBAUD, BULB GROWER,

Quartier du Temple, Toulon, var, France.

Cable address Benrimbaud, Toulon.

The largest cultures in the South of France, of **WHITE ROMAN HYACINTHS,** Narcissus Paper White grandiflora, N. Double Roman. N. **Double Von Sion,** true pure yellow, and other Daffodils. **Lilium Candidum,** the largest bulbs. Freesias. Jonquilla Campernelli, largest flowering, for early forcing, Allium, Anemone, Cardinal's Hat, A. Double Rosette the earliest, etc. Prices on application.

Mention American Florist

Choice Dutch Bulbs

AND NEW VARIETIES OF ATTRACTIVE BULBOUS PLANTS, GROWN BY

C. G. VAN TUBERGEN, JR.,

Haarlem, Holland.

For Fall Importation, catalogues free on application to his sole agents

C. C. ABEL & CO., P. O. Box 920. New York.

Phœnix rupicola.

This useful and beautiful Date Palm in **EXTRA FINE PLANTS,** growing in from 7 to 10-inch pots, from $3.50 to $7.50 each, according to size.

EDWIN LONSDALE, Wyndmoor,

STATION "G," (Chestnut Hill P. O.) PHILADELPHIA.

GT. VAN WAVEREN & KRUYFF,

GROWERS OF

Hyacinths, Tulips, Crocus, Daffodils,

LILIES, ETC., ETC.

SASSENHEIM, Haarlem, HOLLAND.

ESTABLISHED 1866.

Mention American Florist.

R. VAN DER SCHOOT & SON,

HILLEGOM, - HOLLAND,

Largest Growers of

HYACINTHS, TULIPS, NARCISSUS, SPIRÆA, LILIES OF THE VALLEY, ETC.

HEADQUARTERS FOR HIGH GRADE FORCING BULBS.

Wholesale Importers should write us for Prices.

OUR NEW TRADE LIST NOW READY.

Mention American Florist.

We Sell Bulbs!

Special Prices on Application.

Weeber & Don

Seed Merchants and Growers,

114 Chambers St., NEW YORK.

LILY OF THE VALLEY BULBS.

OSCAR KNOPFF & CO. Erfurt Germany,

Seed growers to H. H., the Emperor of Germany.

Very BEST Hamburg and Berlin qualities, 3 years old, for forcing.

For particulars apply to

C. B. RICHARD & CO., AGENTS, 61 Broadway, NEW YORK.

Lily of the Valley Bulbs.

THE STAR BRAND

SPECIALLY RECOMMENDED FOR LATE FORCING.

We are now booking Import orders for shipment from Hamburg in October or November.

REISS & BRADY, 280 Washington Street, New York.

G. J. MOFFATT,

Manufacturer of

PAPER BAGS AND ENVELOPES

Special attention given to

Seed Bags and Catalogue Envelopes.

NEW HAVEN, CONN.

Houston, Tex.

Trade has been fine this season, in fact much better than ever before. The greatest demand has been for roses, coleus and geraniums, although there has been a good trade on general stuff. There has been a marked decrease in the demand for floral designs and a corresponding increase in the demand for loose cut flowers. I think on the whole the loose cut flower trade pays the best in the end, if a man has plenty of flowers and does not have much help. I have noticed at a great many funerals lately that the principal decorations were bunches of flowers tied with white satin ribbon.

Mr. C. Leslie Reynolds speaks of the "galax leaf" as being valuable for decorating. This reminds me of the fact that here in the south we have a very valuable leaf for all purposes, viz., the Magnolia grandiflora, our common magnolia of the swamps and streams. It is an evergreen, stiff, does not wilt and will keep some time in perfect condition. Walls, pillars, columns, etc. can be covered with them by simply tacking them on with small tacks, or they can be strung with a needle and thread for making festoons.

WALTER W. WESTGATE.

Base Ball.

On Saturday, June 24, the Pitcher & Manda B. B. nine visited Floral Park, L. I., to play a match game with the John Lewis Childs nine of that place.

On the following Saturday, July 1, the Peter Henderson nine of Jersey City, will visit Floral Park for the same purpose.

S. C. Y.

Patents Recently Granted.

Plant protector, Leonard Bricker, St. Louis; Pruning implement, Israel B. Beekly, Carleton, Neb.; Receptacle for growing plants, Carl Hoffman, Roseburg, Oregon.

A YOUNG GARDENER named Frank Goeschel, 25 years of age, is reported to have left Mr. A. Jablonsky, florist, of St. Louis, under a financial cloud.

Kills Mildew and Fungus Growth. What does? GRAPE DUST. Sold by Seedsmen.

OUR Sash Lifter AND Hinges will do the work and cost you less than any other. Send your name and address and we will mail you description and price.
BAY STATE HARDWARE CO. 272 Freeport Street, BOSTON, MASS.

TRADE MARKS. COPYRIGHTS.

SOLICITOR OF U. S. AND FOREIGN PATENTS, Atlantic Building, Washington, D. C. (Send sketch or model for free examination as to patentability.)

Mention the American Florist when writing to advertisers on this page.

SOLID BED PLANTING
By the new method will be found described in the book,
HOW TO GROW CUT FLOWERS.
A PRACTICAL TREATISE ON
THE CULTIVATION OF THE ROSE,
And Other Flowering Plants for Cut Flowers, sent to any address upon receipt of $2.00. M. A. HUNT, Terre Haute, Ind.

Cape Flowers, new crop in best white quality at $1.00 the lb.; 10 lb. lots, $9 net.
Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 28-in. upwards, at 40c., 45c., 50c., 60c., 75c. and $1.00 each, according to length.
Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.
Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.
Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc. For prices consult our
Trade Catalogue, mailed free.
August Rölker & Sons, 136 & 138 W. 24th St., P. O. Station E. New York.

MARSCHUETZ & CO., Florists' Supplies, 23 & 25 N. 4th St., PHILADELPHIA, PA. Send for Catalogue.

ERNST KAUFMANN & Co., Florists' Supplies, 113 NORTH 4TH STREET, PHILADELPHIA, PA.

CUTS!

Wood Engraving, Zinc Etching, Half-Tone, Wax Engraving, Photo-Engraving, Designing.
MANZ & CO., 183 Monroe Street, CHICAGO. ENGRAVERS.

THE GREAT ANTIPEST. For particulars, see next week. R. W. CARMAN, GEN'L AGT., 291 Amity Street, FLUSHING, Queens Co., N. Y.

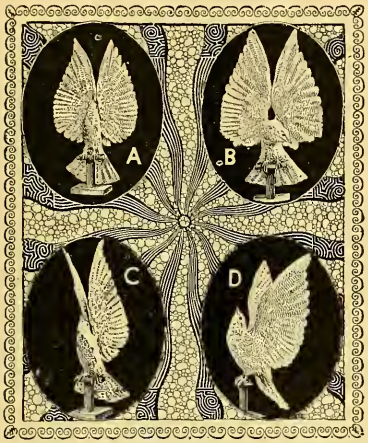
REMEMBER
That Neatness and Prosperity go hand in hand.
The good business man is just as careful about the appearance of his place of business during the dull summer months as in the busy times in winter. If a store is worth keeping at all it is worth keeping well. Fresh flowers are of little use in the hot months for store decoration. Fill up your window and show cases with an attractive display of goods that will keep well until sold. There are handsome Baskets, Metal Designs, Wheat Sheaves, Immortelle goods, etc. in great variety, all of which we can supply you at lowest prices for first-class stock. Keep the flies and dust off them and your store will prove an attraction to your customers and a profit to yourself. Send for list of summer supplies.
H. BAYERSDORFER & CO., Wholesale Only, 56 N. 4th Street, PHILADELPHIA, PA.

TO TAKE PLACE OF WIND MILLS
HOT AIR PUMPING ENGINES
A Windmill Is unreliable because it depends upon the elements for its power; hydraulic rams also depend upon favorable conditions and waste as much water as they secure. Steam pumps require skill and hand pumps demand labor and time. The DE LAMATER-RIDER OR DE LAMATER-ERICSSON Hot-Air Pumping Engines are especially designed for pumping water, and from shallow streams or any kind of well. They are simple, safe and reliable, require no steam and have no valves. They require very little heat to operate them, and can be arranged for any kind of fuel.
Send for illustrated catalogue to THE DE LAMATER IRON WORKS, 87 South Fifth Av., NEW YORK, N. Y.

THE WABASH . . . WILL BE THE . . . "FLORISTS LINE" TO THE ST. LOUIS CONVENTION, as well as returning.
Write F. A. PALMER, Gen'l Pass. Agt., 201 Clark Street, CHICAGO.
It is expected a party will be made up leaving Chicago about August 7.

REMOVAL NOTICE.

Please Note Change of Address: 850 Montgomery Street, Jersey City, N. J



DOVES

DOVES

DOVES

× × ×

First quality.... .... $14.00 a doz.
Second quality..... 12.00 "
Extra selected..... 15.00 "

10 per cent. off on orders of two dozen or more.

× × ×

S. J. RUSSELL,

850 Montgomery St.,

JERSEY CITY, N. J.

FOR SALE BY Messrs. F. E. McAllister, Ed. Jansen, A. Herrmann, N. Steffens and Reed & Keller, New York; W. C. Krick, Brooklyn, N. Y.; H. Bayersdorfer & Co., Ernst Kaufmann and Marschuetz & Co., Philadelphia, Pa.; C. Ribsam & Sons, Trenton, N. J.; J. M. McCullough's Sons and B. P. Critchell & Co., Cincinnati, Ohio; J. C. Vaughan, Chicago, Ill.; Wisconsin Flower Exchange and Currie Bros., Milwaukee, Wis.; C. A. Kuehn, S. Mount & Co., C. Young & Sons Co. and Jordan Floral Co., St. Louis, Mo.; C. Strauss & Co. and Ed. S. Schmid, Washington, D. C.; G. W. Currey & Co. and Eckhardt & Co., Nashville, Tenn.; T. W. Wood & Sons, Richmond, Va.; U. J. Virgin, New Orleans, La.; D. B. Long, Buffalo, N. Y.; J. A. Simmers, Toronto, Ontario

---

The **FAIRBANKS** GALVANIZED **STEEL**

Wind MILLS AND **TOWERS**

Are WARRANTED to be as well made, of as good material, and to produce more power than any other steel mill made.

THE ECLIPSE WIND MILL
the Original Self-regulating Wood Wheel.

Pumps, Tanks, &c. Send for Catalogue and Prices.

Fairbanks, Morse & Co., Chicago, Ill.

Mention American Florist.

THE PERFECT DRAINAGE

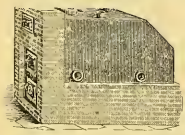
BENCH TILE

For circulars, etc., address

W. P. Wight, Upland Green Houses,

Send your business card. MADISON, N. J.

Mention American Florist.



GREEN-HOUSE HEATING,
MYERS & CO.
1518 & 1520 S. 9th St.,
PHILADELPHIA.
Send for catalogue and price list.

FLORAL DESIGNS
The Cut Flower Worker's friend. Fine book of 160 pages. Send $3.50 for it, to
J. HORACE McFARLAND, Harrisburg, Pa.

H. M. HOOKER COMPANY,

57 and 59 W. Randolph Street, CHICAGO,

NATURAL GAS MADE GLASS

FOR GREENHOUSES.

Write for latest prices.

FRENCH GLASS For CONSERVATORIES, ROSE HOUSES, Etc. Etc.

VANHORNE, GRIFFEN & CO.,

Importers of PLATE and WINDOW GLASS. Manufacturers of BENT GLASS and FRENCH MIRRORS.

131-133-135-137 FRANKLIN STREET, NEW YORK.

Note—Imported Glass is used in the best grade of Greenhouse building.

SMITH & WEBSTER,

MAKERS OF

GREENHOUSE PIPE

FOR HOT WATER AND STEAM,

193 Lake Street, - CHICAGO, ILL.

ESTABLISHED 1866.

FLORISTS WIRE DESIGNS

MANUFACTURED BY

N. STEFFENS

335 EAST 21ST ST. NEW YORK.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

Always mention the American Florist when writing to advertisers.

St. Louis.

The gradually increasing warm weather is having its usual effect upon the market; stock is coming in small and poor. The last of the school commencements have passed and from now on nothing but funeral work will be in demand, and white flowers will be at a premium.

Hollyhocks are in the market and are meeting with quite a sale, as they are very useful in filling up, and make a good background; the double white are most in demand. Sweet peas are also in in quantity, and seem to be popular, judging by the number of these worn.

All the local committees have gotten down to hard work and in a short while arrangements for entertaining the S. A. F. will be completed, and a large attendance is looked for.

It is with regret that we hear of Mr. Sanders' misfortune, he being confined to the house through the soreness of one foot. There is an element of danger also, as it is liable to render him a cripple. Mr. Sanders holds the howling record for the club and it is more than probable that he will be unable to prepare for the contest in August. It is with surprise that we learn of the lessening interest manifested in bowling by the eastern clubs, as we had hoped to have them all with us this year; a contest will be arranged, however, for all that come. All clubs expecting to have a team here during the convention would confer a favor upon the home club by either notifying the president, Mr. Fred Ostertag, 2334 Washington avenue, or the secretary, Mr. Chas. Young, 1406 Olive street. The interest here is on the increase, some members practicing two and three times a week in order to get on the team. R. F. T.

EVANS' IMPROVED
CHALLENGE VENTILATING APPARATUS
Write for Illustrated Catalogue.
QUAKER CITY MACHINE WORKS, Richmond, Ind.

FLORISTS' HOSE,
Made by E. W. Holt, member of the Society of American Florists.
Goodyear Rubber Store,
2 W. 14TH ST. NEW YORK.

Lawn Vases.
THE LARGEST IN THE MARKET FOR THE MONEY.
17x34-inch ....price $1.00.
17x34-inch, with base, price $1.75.
20x22 inch .....price $1.50.
20x22-inch, with base, price $2.25.
Send for our price list of Standard Flower Pots, Plain and Fancy Vases, etc., etc. Terms cash f. o. b.
HILFINGER BROS. POTTERY, Ft. Edward, N. Y.

IMPROVED GLAZING.
Zinc Joints for butting glass without laps. No leakage. No sliding of glass. Practically air tight. Keeps out cold winds, thereby saving fuel. No laps, saves enough glass to pay for the zincs. No breakage of glass on account of frost or ice. Some of the largest growers in the country are using "Gasser's Patent Zinc Joints" with entire satisfaction.
Write for sample and price list.
J. M. GASSER, FLORIST,
101 Euclid Ave., CLEVELAND, O.

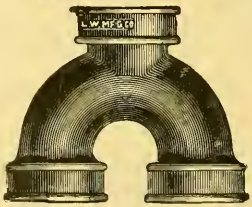
D. H. HOBERTS,
159 & 161 South Fifth Ave., New York.
NATURAL GAS MADE GLASS,
for Rose Houses, Conservatories, etc., etc.
Look at our World's Fair Exhibit in Horticultural Building.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

Mention American Florist.

THE "LOCKLAND" Sash Bars
ARE ALWAYS SATISFACTORY.
This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.
GUTTER MATERIAL, RIDGES, SASH, ETC.
The finest CLEAR CYPRESS used.
Write for circulars and estimates.
LOCKLAND LUMBER CO.
Lockland, O.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.
Pipe can be easily put together by any one, very little instruction being needed.
GET THE BEST!
Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.
Mention American Florist.
L. WOLFF MFG. CO., 93 to 117 W. Lake Street, CHICAGO.
WRITE FOR ILLUSTRATED CIRCULAR.

"Standard" Flower Pots.
As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address
The Whilldin Pottery Company,
BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.
Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.
A. H. HEWS & CO., N. Cambridge, Mass.

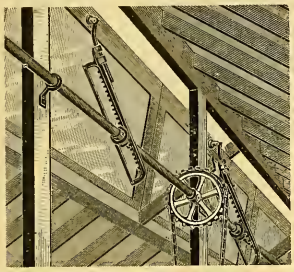
Standard Flower Pots.
We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.
SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

Always mention the American Florist when writing to advertisers.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser in these columns.

SEE HERE BROTHER FLORIST!

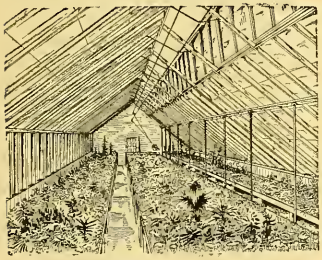
Arn't you tired going through your houses two or three times a day year after year and lifting your ventilating sash one at a time and propping them up with sticks or pots, with a chance of having sash blown off and broken glass to pay for? If you are



We have got just the thing you need, the **Newest** and **Best** thing out. "The New Departure" for **about half** the cost of the old style. Send for Descriptive Catalogue to

J. D. CARMODY, Evansville, Ind.

THE CHAMPION



Automatic Ventilator.

The cheapest, easiest to operate, and by far the best machine in the market. Don't buy a Ventilator until you have seen my illustrated descriptive circular, which will be sent you free, giving prices, etc. Also **Champion Soil Pulverizer and Sifter.**

Address, **E. E. WOLF,**
Box 114. SPRINGFIELD, O.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

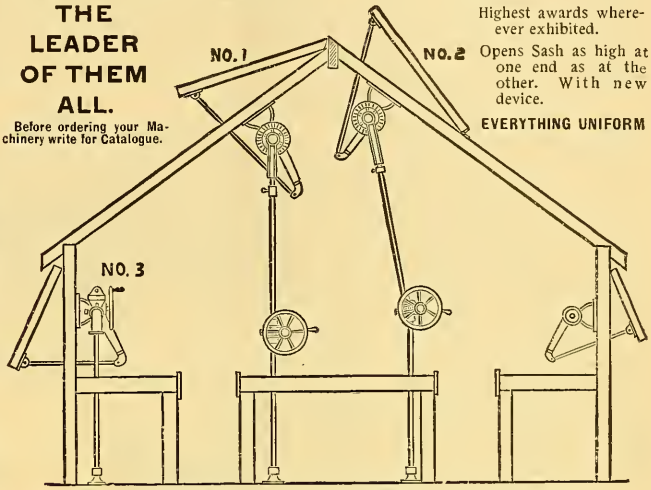
Clear Cypress, from bottom gutter up is my specialty.

Lyman Felheim, ERIE, PA.

STANDARD VENTILATING MACHINERY,

THE LEADER OF THEM ALL.

Before ordering your Machinery write for Catalogue.

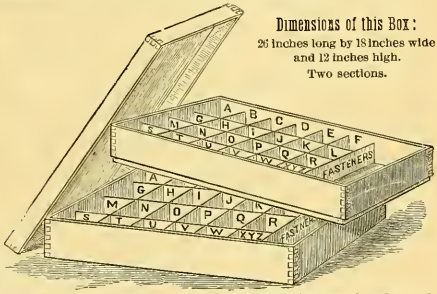


Highest awards wherever exhibited.

Opens Sash as high at one end as at the other. With new device.

EVERYTHING UNIFORM

E. HIPPARD, YOUNGSTOWN, OHIO.



Dimensions of this Box:
26 inches long by 18 inches wide and 12 inches high.
Two sections.

With an order for 500 letters, we furnish a box made of wood nicely stained and varnished, such as is represented in the cut.

BOSTON FLORIST LETTER CO.

Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1½-in and 2-in 2.00 per 100. Patent fastener with each letter.

OUR NEW SCRIPT LETTER, $4.00 per 100.

N. F. McCARTHY, Treas. & Mangr. | Address 13 Green St., **Boston, Mass.**

Address all correspondence to 1 Music Hall Place.

We have a new **FASTENER** which we consider a decided success. Any customers having old style fasteners which they wish to exchange, can do so without additional cost by writing us.

AGENTS:

Marschnetz & Co., 25 N. 4th St., Phila., Pa.
A. Roiker & Sons, New York.
F. E. McAllister, 22 Dey St., New York.
A. D. Perry & Co., 33 Warren St, Syracuse, New York.
Ernst Kaufmann & Co., 113 N. 4th St., Phila.
H. Bayersdorfer & Co., Philadelphia, Pa.
A. C. Kendal. 115 Ontario St. Cleveland, O.
J. A. Simmers, Toronto, Ont. Agent for Canada.
E. H. Hunt, 79 Lake St., Chicago, Ill.
Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.
H. Sunderbruch, 4th and Walnut Sts., Cincinati, O
T. W. Wood & Sons, 6th and Marshall Sts. Richmond, Va.
Jas. Vick's Sons, Rochester, N. Y.
C. A. Kuehn. 1122 Pine St., St. Louis, Mo,
D. B. Long, Buffalo, New York.
C. F. Huntington, Indianapolis, Ind.

These Letters are handled by all the Wholesalers in Boston.

J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS •

Greenhouse Material,

LOUISVILLE, KY.

Mention American Florist.

STANDARD HOSE MENDER.

The only Mender using ordinary galvanized wire No. 14, instead of expensive bands. Any person can handle it with perfect ease. Thousands in use and all testify to its Wonderful Merits.

Sample Box, by Mail, 50 cts.

E. HIPPARD, Youngstown, Ohio.

When writing to any of the advertisers on this page please mention the American Florist.

Farmer Christopher.

The fact that the illustrious descendant of America's discoverer is *a farmer* as well as some other things, came out during his recent visit to Philadelphia while a guest of A. J. Cassatt, Esq., (of the Pennsylvania R. R.), one of the bright lights of "The Farmers' Club."

The feelings of the Duke toward the people of this country, and particularly of this city, were very prettily expressed in a speech at the dinner given to him at the Farmers' Club. The Duke said:

"It gives me great pleasure, and it is indeed an honor to the descendants of Columbus, to meet here this evening such distinguished persons, who so well represent Philadelphia, the City of Brotherly Love, that is one of the greatest centers of wealth, industry and commerce of your wonderful country, and at the same time the cradle of its independence and of all the liberties of the American people. The kind welcome of the Farmers' Club has been very delightful to me, because I am also a farmer, doing my best to increase the wealth of my native land. You may rest assured that though the sad moment of leaving America approaches for me, I have learned to admire you so much and highly that though I may leave my heart will remain with you."

The "Farmers' Club," by the way, is famous more for the *quality* than the *quantity* of its membership. The whole club could be squeezed into a good sized tally-ho. It includes such "horny handed sons of toil" as George W. Childs, W. M. Singerley, A. J. Cassatt, and about a half score more wealthy Philadelphians who make a hobby of farming. One of their boasts is that they can supply their guests with milk raised on their own farms for very little more than it costs them for Mumm's Extra Dry. The conversation goes something like this:

"Gentlemen, there's milk from my own Jerseys at that end of the table and there's champagne at this. You can have your choice. Of the two I believe the milk costs me the most."

The poet Coleridge never heard of the Farmers' Club perhaps. If he had it would have explained what he meant by the couplet

"For he hath fed on honey-dew
And drunk the milk of Paradise."

The "Milk of Paradise" may now be classed as something more than an "airy nothing." G. C. W.

GLASS

which is absolutely perfect for modern greenhouse construction.

ROCK BOTTOM PRICES.

Send for Estimate. Satisfaction Guaranteed

REED GLASS CO.

65 WARREN STREET and
46, 48, & 50 COLLEGE PLACE,
—NEW YORK CITY.—

STOTT'S DOUBLE SPRAYER

Read Advertisement in Next Week's Issue.

LORD & BURNHAM CO.

Horticultural Architects and Builders,

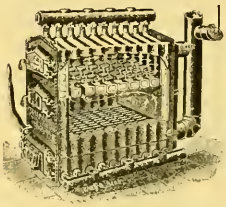
STEAM AND HOT WATER HEATING ENGINEERS.

Plans and estimates furnished on application.

Front view of a portion of our exhibit at the World's Fair.

. . . SEND FOUR CENTS POSTAGE FOR ILLUSTRATED CATALOGUE. . . .

LORD & BURNHAM CO., Irvington-on-Hudson, N. Y.



Royal Heaters.

—:o:—

HOT-WATER,
STEAM.

Always a Free

CIRCULATION

of Water.

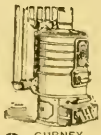
LARGE HEATING SURFACE.

HART & GROUSE,

UTICA, N. Y.

Gurney

HOT WATER
HEATERS and RADIATORS
FOR HEATING
Dwellings, Public Buildings, Etc.
BY
HOT WATER CIRCULATION



GURNEY.

The apex of success in house heating is reached by the Gurney Heaters. Their excellent work during the past severe winter is but another tribute to their superiority. Our book "*How Best to Heat Our Homes*" sent free to anyone.

Gurney Hot Water Heater Co.
163 Franklin St., Boston, Mass.
59 Wabash Ave., Chicago, Ill.

SELLING AGENCIES:
Johnson & Co., 71 John St., New York.
J. C. F. Trachsel, 216 Arch St. Philadelphia.

DOUBLE CROWN.

STEAM · AND · HOT · WATER · HEATERS
FOR
GREENHOUSE HEATING.

156

DIFFERENT SIZES.

American Boiler Company.

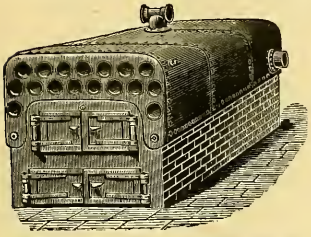
BOSTON, 195 Ft. Hill Square. NEW YORK, 94 Center St. CHICAGO, 34-36 Dearborn St. DENVER, Mining Exchange Bldg. SAN FRANCISCO, 80 Crocker Bldg.

ESTABLISHED 1854.

DEVINE'S BOILER WORKS.

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers



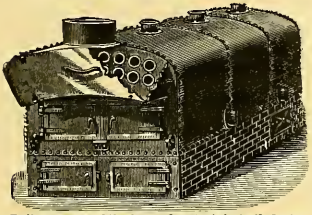
Capacity from 350 to 10,000 feet of four-inch pipe.
SEND FOR NEW LIST.

FRANK DAN BLISH, Att'y,

OFFICE, 189 STATE STREET.
WORKS, 56th & WALLACE STREETS.
CHICAGO.

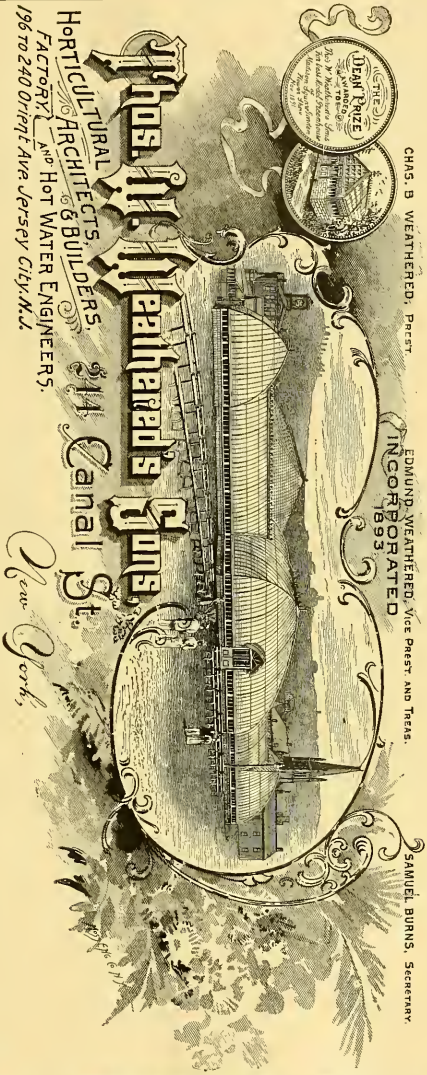
THE WILKS HEATER,
FOR HEATING
GREENHOUSES, STORES, DWELLINGS, ETC.
Manufactured by *THE S. WILKS MF'G CO.* 123 S. Clinton St., CHICAGO, ILL.
SEND FOR CATALOGUE.

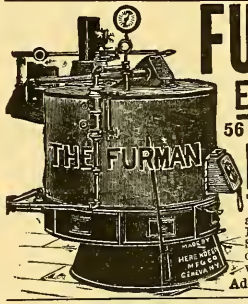
KROESCHELL BROS.
IMPROVED
Greenhouse ×× Boiler,
41 to 55 Erie St., CHICAGO.



Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around front, sides and back). Write for information.

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.


Thos. H. Weathered's Sons,
HORTICULTURAL ARCHITECTS & BUILDERS.
FACTORY AND HOT WATER ENGINEERS.
196 to 240 Orient Ave. Jersey City, N.J.
314 Canal St.
New York,
CHAS. B. WEATHERED, PREST.
EDMUND WEATHERED, VICE PREST. AND TREAS.
INCORPORATED 1893.
SAMUEL BURNS, SECRETARY.



FURMAN BOILERS

Economical — Substantial — Safe.

56 STYLES AND SIZES—BURNS HARD OR SOFT COAL.

Modern Hot-Water Heating

These Boilers have a high reputation for Staunchness, Durability and Safety, and are GREAT COAL SAVERS. Minimum Friction and Maximum Velocity only obtained by VERTICAL WATER CIRCULATION. Send for new 150-page book giving full particulars and a great deal of valuable information on modern Heating and Ventilation, with plans and tables for correct hot-water work. Mailed free.
Address HERENDEEN MFG. CO., 26 Vine Street, GENEVA, N. Y.

VICTOR SPRAY PUMP.
The most wonderful pump ever invented. Requires no foot-rest or support. Send for prices.
HENION & HUBBELL, 55 N. Clinton St., Chicago, Ill.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.
JOHN G. ESLER, Sec'y F. H. A., Saddle River, N. J.

Index to Advertisers.

Abel C C & Co....1224 1225
Adv. Rates, etc.....1222
American Boiler Co ..1230
Anchorage Rose Co. ..1219
Baller F A. 1220
Barnard W W & Co...1224
Bay State Hdw Co.....1221
Bayersdorfer H & Co .1236
Berger H H & Co.....1224
Bock Theo. 1220
Bonsall Jos E & Son .1222
Boston Letter Co ... 1220
Brackenridge & Co....1221
Brauer & Richter.....1220
Burns & Raynor.....1223
Burrow J G..... 1220
Burton John..... 1218 1219
Carman R W..... 1220
Carmody J D.....1220
Chandlee Geo F 1225
Chipman Bros. 1224
Corbrey T J 1223
Cox Seed & Plant Co..1224
Currey G W & Co 1222
De Lamater Iron Wks1236
Devine's Boiler Wks..1231
Dillon J L.....1219
Dreer H A..... 1224
Elderling J W 1224
Elliott W H.....1222
Ellison Wm.... 1223
Fairbanks Morse & Co1227
Felheim Lyman.....1229
Field S B.....1221
Forstermann I. 1221
Gasser J M 1228
Gonzalez & Co.....1221
Goodyear Rubber Store 1228
Gurney Heater Co ...1230
Hall Ass'n.....1224
Hammond Benj.....1236
Hancock Geo 1221
Hart James.....1223
Hart Michael A 1223
Hart & Crouse.....1230
Hartford H E.....1222
Henion & Hubbell.....1231
Herendeen Mfg Co...1231
Herr Albert M.....1220
Hews A H & Co.....1228
Hillinger Bros.....1224
Hill E G & Co.....1221
Hippard E.....1229
Hitchings & Co.....1232
Hooker H M Co.....1227
Horan Edw C 1223
Hulsebosch Bros 1225
Hunt E H..... 1223
Hunt M A..... 1219 1223
Hunter & Purdy... ...1223
Ives Byron H.... 1220
James R H 1224
Jennings E B.....1229
Kaufmann Ernst & Co1226
Kemble Floral Co ...1219
Kennicott Bros..... 1223
Koffman E.....1222
Kroeschell Bros . . .1231
Kuehn C A.....1223
Langan Bros.....1229
La Roche & Stahl1219 1222
Ley John H.....1220
Lockland Lumber Co..1228
Lombard R T.....1221
Long Dan'l B.....1223
Lonsdale Edwin.....
...1219 1220 1221 1224 1225
Lord & Burnham Co..1230
McCarthy N F & Co...1223
McFarland J H.....1227
McFarland J H Co....1218
McGowan John.....1221
MacBean A S.....1219
Mann R & Son.....1224
Manz J & Co.....1236
Marschnetz & Co.....1229
May John N.... 1221
Michel Plant & Bulb Co 1224
Milliang Bros.....1223
Moffatt G J.....1225
Moninger Jno C .... .1232
Moore Frank L.....1219
Moser J J 1224
Myers & Co 1227
Niles Centre Floral Co1223
Olson M 1223
Ouwerkerk P.....1221
Peck & Sutherland....1223
Pennock C J.....1221
Pennock Sam'l S 1222
Pierson F R Co. 1224
Prince A G & Co.....1223
Quaker City Mach Co.1228
Ruckemann Felix.....1218
Randall A L. 1223
Reed Glass Co.....1230
Reimschneider Ernst.1224
Reiss & Brady.....1225
Renard Joseph.....1221
Richards C B & Co ...1225
Rimbaud Benj..... ...1225
Roberts D H.....1228
Robertson T D.....1218
Roehrs Theo.....1223
Rohrer Fred.... 1220
Rogers Nurseries.....1220
Rolker A & Sons.....1226
Rupp John F.....1221
Russell S J.....1227
Sulzer Seed Co. 1218
Sander & Co. 1221
Schneider Fred. 1220
Schulz Jacob.....1219
Scollay John A 1232
Segers Bros.. 1225
Shelmire W R.....1221
Sheridan W F.....1223
Siebrecht & Wadley...1221
Simons R E..... 1218
Siplle, Doppel & Co...1228
Situations, wants.....1218
Smith Nathan & Son..1221
Smith W L 1218
Smith & Webster.....1227
Steffens N.....1227
Stott Garden Imp Co..1230
Struck J N & Bro.....1221
Sunderbruch H L.....1223
Tesmer Julius & Co...1222
Tesson R F.....1218
Tiefenthal Oscar.....1220
Tricker Wm.....1221
Vander Schoot R & Son. 1225
Van Horne Griffen & Co 1227
Van Tubergen C G Jr.1225
Van Waveren & Kruyff.... 1225
Vaughan J C.... 1219 1224
Wabash R R 1236
Weathered's Sons T W1231
Weeber & Don.....1225
Welch Bros.....1223
Westgate N E & Son..1230
Whilldin Pot Co .... .1228
Wight W F.....1227
Wilks S Mfg Co.... .1231
Williams H W & Son..1218
Winter S D.....1218
Wisconsin Flower Ex.1222
Wolf E E 1229
Wolff L Mfg Co.....1228
Wood Bros.....1219
Zirnglebel D.....1220

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

THE AMERICAN FLORIST and *Gardening* together to one address for $1.75. Send orders to the American Florist Co.

CYPRESS GREEN HOUSE MATERIAL

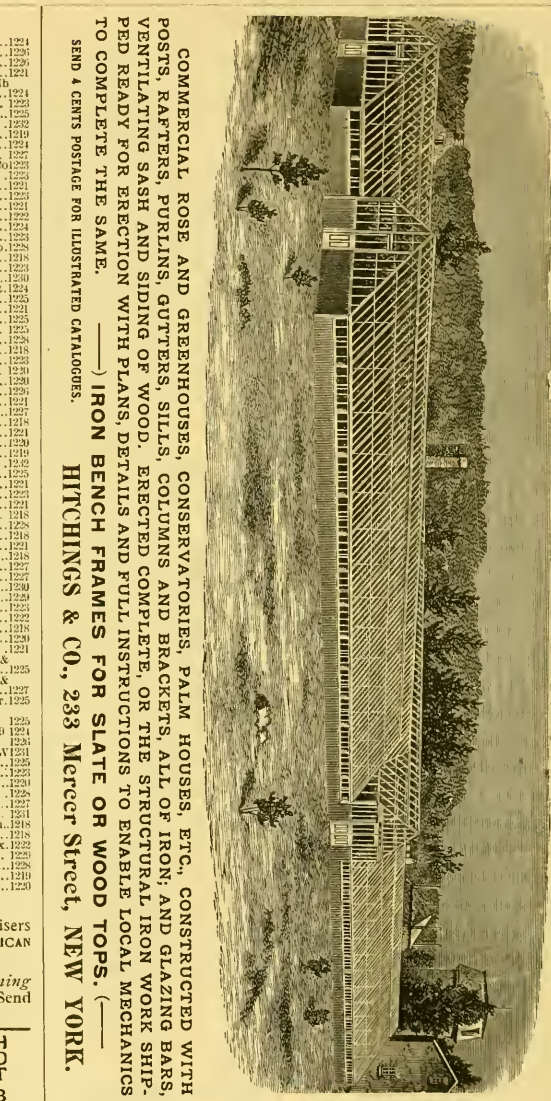
CLEAR

SASH

BARS

HOT BED AND VENTILATING SASH

JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.



HITCHINGS & CO.
ESTABLISHED 1844.

GREENHOUSE HEATING AND VENTILATING,
HORTICULTURAL ARCHITECTURE AND BUILDING.

COMMERCIAL ROSE AND GREENHOUSES, CONSERVATORIES, PALM HOUSES, ETC., CONSTRUCTED WITH POSTS, RAFTERS, PURLINS, GUTTERS, SILLS, COLUMNS AND BRACKETS, ALL OF IRON; AND GLAZING BARS, VENTILATING SASH AND SIDING OF WOOD. ERECTED COMPLETE, OR THE STRUCTURAL IRON WORK SHIPPED READY FOR ERECTION WITH PLANS, DETAILS AND FULL INSTRUCTIONS TO ENABLE LOCAL MECHANICS TO COMPLETE THE SAME.

SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUES.

——) IRON BENCH FRAMES FOR SLATE OR WOOD TOPS. (——

HITCHINGS & CO., 233 Mercer Street, NEW YORK.

JOHN A. SCOLLAY,
74 & 76 MYRTLE AVE.,
BROOKLYN, N. Y.

GREENHOUSE HEATING
— AND —
Ventilating Apparatus.

Patentee and Manufacturer of
HOT WATER BOILERS,
GREENHOUSE PIPE,
PIPE FITTINGS,
VALVES, TANKS, ETC.

☞ Estimates of cost given, and Illustrated Catalogue furnished on application.

GoodelHH 15 Dec 93
Mass Agri Col

THE AMERICAN FLORIST

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, JULY 6, 1893.** **No. 266**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company. Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.
322 Dearborn Street, Chicago.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,
P. O. Drawer 164, CHICAGO.
Eastern Office: 67 Bromfield St., Boston.

The Ninth Annual Meeting

— OF THE —

SOCIETY OF AMERICAN FLORISTS

— WILL BE HELD AT —

ST. LOUIS, MO.,

AUGUST 8, 9, 10 AND 11, 1893.

Members may remit the annual dues ($3.00) to the secretary or treasurer prior to the meeting, thus avoiding the crowd and relieving the officers on the opening day. Badge for 1893 will be sent by mail to those who remit in advance of the meeting.

Intending members can obtain any information wanted by addressing the secretary.

OFFICERS:

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer.

CONTENTS.

The World's Fair 1233
Salable plants for a retail trade 1234
Veranda boxes (2 illus) 1235
Aquatic plants 1235
Carnations—Seasonable hints 1236
—Chester County Carnation Society 1236
Express rates reduced 1236
Miscellaneous seasonable hints 1236
Philadelphia 1237
New York 1238
Boston 1238
Chicago 1238
Buffalo 1238
St. Louis 1238
Toronto 1239
News notes 1239
As it appears through four eyes 1240
Our annual convention number 1242
The seed trade 1244
Pres. Penna. Hort. Soc. entertains Columbus . 1246
Cincinnati 1250

Society of American Florists.

Members whose dues for 1892 remain unpaid are reminded that arrearages must be paid up before they will be entitled to any of the privileges of membership for current year.

All parties desiring space in the trade exhibit should make prompt application to Mr. E. H. Michel, Magnolia and Tower Grove Aves., St. Louis, who is superintendent of this department.

Those wishing to secure hotel accommodations in advance should address Mr. R. F. Tesson, West Forest Park, St. Louis. WM. J. STEWART, Sec'y.

The World's Fair.

The roses are still blooming on the island, but the best show now is made by the fence of prairie roses around the rose garden. These climbers are covered with flowers, covering the wire of the fences in most attractive fashion. Clothilde Soupert is in better condition than last week; a good many of the earlier flowers burned, but the present crop of bloom is in fine order. The standards are now blooming freely, but it is a little difficult to see any reason for their being; a four foot stalk stiffened by a stout green stake bearing a head perhaps ten or twelve inches in diameter does not possess many charms for the average sightseer, particularly when we recall the difficulty of wintering them here. Mme. Georges Bruant shows up to good advantage; it is certainly very attractive.

It seems late to find azaleas blooming, but in the exhibit of Parsons & Sons, Flushing, N. Y., we find A. arborea covered with its white flowers, and A. optima opening an abundance of salmon-pink bloom. Both are very attractive shrubs. Parsons' exhibit is an attractive one; it is in a very desirable place, their plot including four handsome oak trees. The excellent labeling of this exhibit is worthy of note; it is particularly clear and distinct. Among conifers they show a number of attractive dwarf forms. The piceas include a number of varieties. P. Remontii was an attractive little specimen, also P. nigra pumila; P. pungens glauca was remarkable for its hoarfrost-like coloring, though but a small plant. P. excelsa Gregoriana was a charming dwarf, a neat little cushion of dull green. Two other forms of P. excelsa were Maxwelliana nana and Finedonensis, both shapely little dwarfs. Among abies excelsa aurea was a very richly colored little spruce while Nordmann's fir was represented by a small but good plant. One of the most richly colored conifers in this group was a little Retinospora filifera aurea, which was the finest color possible in this class. A dwarf Mugho pine was an attractive plant and there are some good tsugas. Among the hemlocks was a nicely colored golden T. occidentalis Vervaeniana. These dwarf conifers seem to be generally admired by sightseers. Among deciduous trees and shrubs in this exhibit were both golden and purple-leaved catalpas, Clethra barbinervis, just coming into bloom, a very good golden dogwood, var. Spathii, and some excellent Japanese maples, the purple-leaved sorts being particularly good.

Out in the herbaceous beds there is still a good show of bloom, though scattering in places. In a good many places the tall yellow day lilies (hemerocallis) make a show, and there are a few good Kæmpfer's irises. But naturally these plants have not had time to become established, and it is a pity they were not planted in more generous clumps, the effect would be so much better. This is the case with many of the showy herbaceous flowers; one cannot help thinking how much more effective the display would be if fewer varieties had been exhibited, and the space given up to larger masses of individual sorts. Take the gaillardias for example; a few scattered flowers are to be seen here and there, the showy coloring being frittered away and lost, whereas a mass of gaillardia forming a border would have been most impressive. A good effect is given by some masses of Tunica saxifraga, covered with a multitude of pale mauve flowers. Another showy thing is one of the rose campions, Agrostemma coronaria, with glaucous leaves and an abundance of magenta blooms. The ever-flowering forget-me-not is covered with bloom, and Ajuga genevensis is freely in flower though not showy. Achillea multifolia rubra is succeeding the earlier milfoils, and Salvia pratensis has an abundance of its dull purple flowers. The funkias too are now coming into bloom, and where planted in clumps they will make a good effect. Of shrubs there is little now in bloom; the tamarix and mock orange are now passing out of flower, and there will be little in that line until the hydrangeas bloom.

Over in front of the large building some of the small pansy beds have been replaced by a mosaic of alternanthera and succulents, but most of the pansies are still flowering very freely. Large beds of cacti are being put in shape; these, with the cannas, which will soon make a fine show work quite a transformation in the view here.

In the greenhouses back of the large building the New York state exhibit is augmented by the gloxinias, which have been grown on in the department greenhouses. They are a fine strain, showing rich colors and marking, and they are also well grown. In the aquatic house the pelican flower and the lattice plant (Ouvirandra fenestralis, which is now blooming) divide honors in the estimation of the visitors. The little rose house, which is just planted with Mrs. W. C. Whitney, Kaiserin Augusta Victoria and Senator McNaughton, looks very trim, and so does the fern house. The display house built by Weathered is finished, but not yet filled; it is an attractive structure. Very odd and unusual are two little houses glazed with hexagonal glass tiles, instead of the conventional sheet glass. These tiles, which look like big quartz crystals, give a very singular look to the houses, which form part of the Swiss exhibit.

Under the big dome the mound is greatly improved by the additional growth of the plants. The north side of the mound, which forms part of the New York state exhibit, is particularly good; the plants, mostly large specimens, are

well arranged, the use of a mimic waterfall, leaping from crag to crag, until it finally falls into a pool, fringed with aquatic plants, giving the effect of a tropic hillside. This use of the water is a wonderful addition, and the arrangement reflects great credit on Mr. J. I. Donlan, who has charge of the New York exhibit under Mr. Dean, and to whose taste the arrangement of the plants is also due.

There is no special floral display for July 4; it was intended to show the fancy caladiums at this date, but they are not yet sufficiently advanced. The next floral display will be the gloxinias.

Salable Plants for a Retail Trade.

In spite of the tendency towards specialism in cut flowers and decorating plants a large proportion of our trade is interested in the growing and retailing of pot and bedding plants. In a good neighborhood, where the people are neither very rich nor very poor, the business is steady, and the profits sure, so long as well-grown plants are offered, in varieties that suit public taste. A good many Chicago retailers are interested in this form of the business; among those on the South Side J. F. Kidwell's establishment may be taken as a good sample of this branch of trade. Mr. Kidwell does a good deal of cemetery work, but his is what may be termed a "basket trade;" his customers buy their plants and then carry them away, and he rarely has to deliver or plant them, which is a great saving of time at a busy season. On being asked what were the lines taken by the demand this spring he responded that it would be hard to name any one line; as far as quantity was concerned alternanthera led, a great deal being used in the cemeteries. This was carried over winter on shelves in the rose houses, paronychioides being kept near the glass, to insure good color, while aurea nana was put under the benches, or anywhere to be out of the way. The first named has to be propagated by cuttings, but aurea nana was divided and potted in small pots, after being carried over winter in 3-inch pots.

Entering one of the houses, a batch of tuberous begonias was noted. On being asked whether they were satisfactory in his trade, Mr. Kidwell responded:

"We find they sell well, as people begin to know them, and our customers find them very satisfactory. According to our experience failure with them outside is more likely to result from a poor circulation of air than any other cause. They will not do well in a close, confined yard. But given right conditions in this respect, we have no complaints of poor growth even when exposed to the full sun."

"Do you raise your plants from seed?"

"No, we find the tubers more manageable and cheaper to raise. We start them from time to time during the winter and spring, so as to have successive batches of salable size. They are started in 2½ or 3-inch pots, and when ready for a shift put in 4 or 5-inch, in which they are sold. We sell these plants for thirty-five cents each, or three for a dollar. We buy mixed colors, but find that reds and crimsons sell better than the paler tints. Customers who bought them last year are buying more freely this season, which shows that they proved satisfactory."

"I see you have a few fine gloxinias."

"Yes, they are all remaining from our stock; we are about sold out. Gloxinias went very well with us."

"No wonder, Mr. Kidwell, the foliage is perfect and the flowers are fine. Do you raise them from seed?"

"No, that would not pay. I buy the bulbs—these are three years old—and start them in February, so as to have them blooming in June. I put the bulbs in 3-inch pots, shifting them into 5-inch for blooming. They must have plenty of water, but it is always risky to let water lie on the upper surface of the leaves, as the beauty of the plant depends so much upon the foliage."

"You find the gloxinia thoroughly salable in your trade?"

"Yes, there is no trouble in disposing of them for fifty to seventy-five cents each; they are not common and are admired in rooms. When in bloom they must not be allowed to dry out or the flowers will wilt, ruining the appearance of the plant."

"I see you have some good fuchsias among your blooming plants."

"Yes, the fuchsias always sell very well, though Black Prince is about the only sort that flowers well right through the summer. Here is something we sell very largely, single petunias. It seems odd, but the double sorts, no matter how handsome or well grown, do not sell as freely as the singles; in fact it is quite difficult to get rid of them."

"Do you raise all your petunias from seed?"

"Yes, they are all sown in February. I buy the double mixed; fully 90 per cent comes single and I get the most desirable colors. From single seed there is a preponderance of poor and washy tints."

"Do you buy rooted cuttings of any of your spring stuff?"

"No, everything is raised on the place, either cuttings or seed. Here is something we use largely, Vinca rosea, the white or white with red eye being rather preferable to the purple. We sow in December, and then take cuttings from the young plants. We can get up a stock very rapidly and the plants are much stronger than if we took cuttings from old stock."

"Do you sell much ageratum?"

"No, I don't know why, but it seems to be going out of favor. Pansies we sell in great quantities; they are sown in August, transplanted in October and carried over winter in frames. Another thing we sell largely is the verbena; we sow them in flats about February 1 and put outside in frames later."

"Haven't you been bothered by the verbena rust?"

"No, it has never troubled us in the least degree. I don't think it troubles seedlings much; there is more damage from it where grown from cuttings."

"I suppose your trade calls for a good many pot roses?"

"Yes; this spring I sold more Clothilde Soupert than all other sorts put together. It is such a precocious and abundant bloomer that it makes a very attractive pot plant. I also sell a good many La France and Wootton. I take plants that have been blooming for a season in benches, pot them in the fall and rest them over winter in a cold frame. They are then sufficiently rested to start up and sell as blooming plants for spring trade."

"Do you think Soupert can be considered hardy here?"

"It is difficult to say decidedly, though I believe that Soupert would pass through the winter in safety if protected with straw wrapping. But last winter I had some plants of Soupert, La France and Wootton left out entirely unprotected and they all bore the winter without any injury. I don't find the hybrid remontants so satisfactory for spring sales."

"Do you do much with pot carnations?"

"I sell a good many, but only pot up two sorts, Garfield and Mrs. Garfield, the light pink known also as Chas. Sumner, and several other names. For my own use I grow Snowdon quite extensively; it is a very satisfactory sort for a grower who uses his own flowers. I had two separate plantings of Mrs. Fisher, which showed a remarkable difference in productiveness. One lot was in heavy stiff soil; these have done but poorly, giving meagre returns, while plants in light soil have flowered very abundantly.

"Here is a house just emptied of bedding stuff; we are now preparing to plant the benches with roses. The roses which have flowered during the winter will be kept going till fall; they are in fine order and will give me a lot of flowers yet. Then they will be removed to make way for spring stuff, and after that is sold the benches will again be planted with roses. This keeps a succession of crops and avoids waste of space."

"I recollect your calceolarias were somewhat injured by that big hail storm in May; did any of them come around?"

"Yes, those that were not too badly cut up got along well, and I had a fine display of bloom—a very good strain. They were sold out clean. Another showy plant that attracts my customers is the pelargonium, but the greatest difficulty is to get good sorts. The show pelargoniums are not common, and the great thing is to have something handsome that everyone else does not have. All retailers have heliotrope, geraniums, etc., and it is necessary to have something a little out of the general run."

"Speaking of geraniums, I suppose they continue to sell as well as ever?"

"Yes, the geranium is always a standard bedding plant. This year there has been, in my trade, an increased demand for good single sorts. It is hard to say why; the trusses are fine, but they naturally do not stand wind and rain as well as the double ones. Ivy leaved geraniums are also standard favorites."

"Did you do much with hydrangeas this spring?"

"No, they do not seem to grow well with us. It may be that the soil is at fault. In future I shall buy plants from localities where they do well for my spring sales.

"You see we run a good deal of stuff in frames. Here are asters; we sell a few of the surplus young plants cheap in spring, but most of them are sold in the late summer and fall when potted and in bloom. Nasturtiums we sell largely in our spring stuff, and we raise a few phlox and dianthus for the same purpose. Tuberoses we start in the spring; a few are sold in pots, but the majority is kept for funeral work."

"What do you use where creeping or trailing plants are required?"

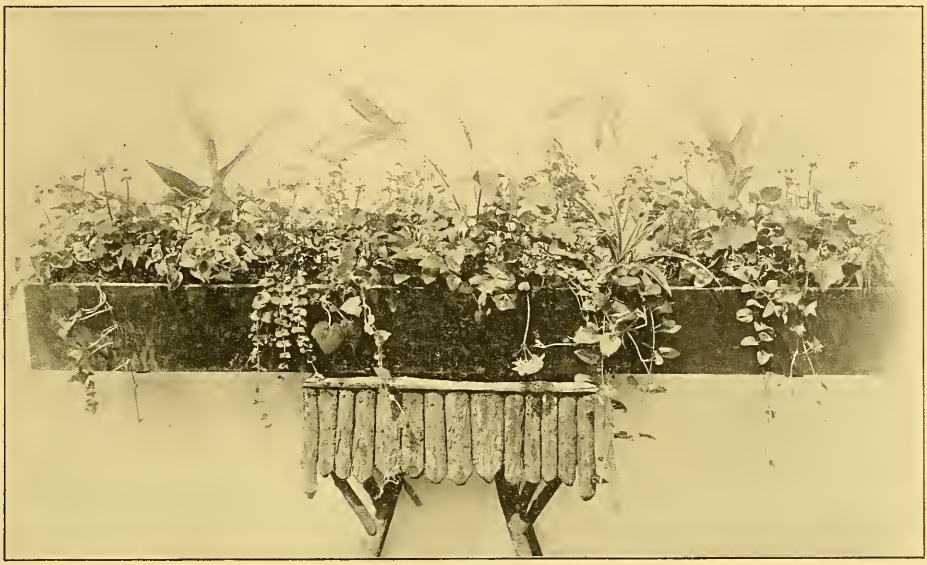
"Cobæa, of course, Kenilworth ivy, English ivy, variegated glechoma, vinca, thunbergia and maurandya, all easily grown."

"You have a lot of chrysanthemums, of course."

"Yes, but I limit them to about fifteen reliable varieties, which have proved satisfactory for pot plants and cutting."

"Your place was set to rights very quickly after that memorable hailstorm."

"Yes, the glass was all replaced as rapidly as possible. Most of the injured plants came around well, though some suffered during the cold wet weather that came afterwards. Now we are pretty nearly cleaned out, as far as spring stuff is concerned. Our plant sales were very large for Decoration Day, and the bulk



ORDINARY VERANDA BOX JUST FILLED.

The box is made of wire, and is 6 feet long, 8 inches wide and 6 inches deep, inside measure.

of the spring sales were past the week after. This has been a very good season and from personal experience sales in all bedding plants were large."

Veranda Boxes.

We present herewith two engravings from photographs of veranda boxes, filled by Mr. Wm. Scott, Buffalo, N. Y. These pictures show the appearance of the boxes just after filling. Later in the season we shall have photographs of these same boxes when they have made good growth and will publish engravings of them as they then appear.

For Mr. Scott's views on filling and caring for veranda boxes consult his article headed "Miscellaneous seasonable hints" on page 1054 of the FLORIST for May 11 last (No. 258).

Aquatic Plants.

It is frequently remarked that a retail florist who does a general trade must handle small quantities of various plants in order to supply the needs of his customers, even though in some instances there does not seem to be much profit in a portion of such stock. But an occasional sale made from the miscellaneous stock tends to encourage further business by creating an impression in the mind of the customer that he can supply all his wants from the varied collection of his local florist, and such an impression is very apt to be communicated among the plant loving portion of the community. It may however, be fairly stated that a few aquatic plants will not long remain among the unprofitable stock of the average florist, from the fact that the knowledge and appreciation of this class of plants has spread so rapidly during a few years past that a general demand for them will doubtless soon appear, and the retail grower who cares to keep up with the times will find it worth while to meet this demand.

This growth of public interest in aquatic plants is largely due to the efforts of Mr. E. D. Sturtevant, Mr. Wm. Tricker and a few other enthusiastic experts in this branch, but who have also been aided in the good work by some of the park superintendents, the aquatic tanks in the various public parks always proving a centre of attraction. Of course, the florist with limited house room cannot handle many of the larger growing nymphæas, or if he does it must be in very limited numbers, but still there is a considerable number of species that need not take up much space, and others that while being of strong growth are hardy or nearly so, and consequently may be kept with very little protection.

Among the hardiest of water lilies are Nymphæa alba, N. candidissima, N. odorata and its charming pink variety, and N. Marliacea chromatella, all of which are admirable, while N. pygmæa, might also be included for the sake of very small aquariums, this species being the smallest species in cultivation at the present time.

The tender nymphæas include a number of the finest species and varieties, some of which are very strong growers, among these being N. zanzibarensis, N. Devoniensis, N. dentata and N. rubra, all of these being strikingly handsome. The so-called water hyacinths, (eichhornias) should also be included among the valuable stock, these being decidedly interesting and salable plants, readily increased and easy to manage.

Eichhornia azurea is very attractive when in flower, the large spikes of lavender flowers possessing a peculiar delicacy and beauty. E. crassipes has been more largely advertised than the preceding, and is really a very interesting plant, and also of suitable growth for a small establishment. The bladder-like leaf-stems of this plant give it a strange appearance and its flowers being about two inches in diameter and of a lilac or pale purple shade form an additional charm.

Limnocharis Humboldtii is another very pretty little water plant, the leaves of which look something like small nymphæa leaves when floating on the surface of the water, the flowers being bright yellow, and standing up several inches above the water. This is also easily increased by means of runners or by seeds. Another miniature aquatic is the water snowflake, Limnanthemum indicum, the foliage of which is green, about three or four inches in diameter, and floating on the surface of the water, the flowers being pure white, star-shaped and fringed, and having the peculiarity of being produced from the stems of the leaves.

The Cape pond weed, Aponogeton distachyon, is another that should not be omitted, its curious little white flowers, or rather spikes of bracts, being very pretty and also very fragrant. This plant seeds quite freely, and is thus easy to increase, and is valuable for small ponds or tanks. Myriophyllum proserpinacoides, perhaps more easily remembered by the uninitiated as the "parrot's feather," is also a good plant for our purpose, growing well outdoors in summer and in winter only requiring cool house treatment to keep it in good condition. The chief beauty of this plant lies in its bright green feathery foliage, the slender stems projecting a few inches above the water and having an elegant effect.

Still another pretty little water plant is Pistia stratiotes, sometimes called "water lettuce." This plant is not adapted for outdoor culture, except in a very sheltered position, and forms a rosette of pale green leaves from two to four inches long, the whole plant floating on the surface of the water, and sending down a quantity of slender roots like a tuft of white hairs. Apart from the last

named species, which does not need any soil, the compost best suited for the water plants here noted is a good loam, in which should be incorporated a liberal quantity of thoroughly rotted stable manure, for plants of this class in general enjoy good living. W. H. TAPLIN.

Seasonable Hints.

The summer growth of the carnation is simply the storing up of material and energy for the production of a crop of flowers in the winter season. We may take a cutting from the bench, pot it, and plant it out in open ground without topping. It soon throws up a flower stalk with bud or buds, which in a short time expand into perfect flowers. While the buds are forming on the upper part of the stem, shoots will be found starting from the axils of the leaves on the lower part. These latter will in turn grow into flowering shoots, producing a second crop of flowers larger than the first. These stems again send out other shoots, which bloom, and so on indefinitely, were it not that the plant becomes unwieldly and cumbersome, or succumbs to disease. This might be said to be the natural growth of the carnation. In our field practice we modify this by nipping off the first shoot from two to four inches from the ground. The next growth of shoots is cut back as close as our experience teaches to be necessary, and so on until we get our plant as large and bushy as our ideal of excellence dictates. This cutting back process is supposed to throw the strength (otherwise used up in making flower stalks) into the main stem, which is no doubt so to a great extent. Still we never like to cut back the plant until the lower shoots are plainly seen, nor yet allow the stem to get too long before cutting as that seems to be a waste of material. This treatment gives us a plant which, instead of growing and flowering in the natural way over a long but intermittent period, has stored up material in stem and roots to give us a larger bloom in a much shorter time. Varieties differ much in their nature, and we must study their independent requirements. The kinds are few however that will not come under the general rule to trim pretty close. The importance of having a good strong thick-stemmed bushy plant will readily be seen; for within it is stored the energy and much of the substance that will form our winter's crop of flowers.

Avondale, Pa. W. R. SHELMIRE.

Chester County Carnation Society.

The regular meeting for July was held at the country residence of Isaac Larkin near Toughenamon, Saturday, July 1, with a full attendance, most of the members bringing their wives. The day being warm the session was held out of doors, which was an agreeable feature.

Mr. Larkin had arranged for a test of three systems or styles of burners for producing heat by combustion of coal oil. One burner used crude oil vaporized by a steam jet, the other two used refined oil forced from an overhead tank in fine jets. One of these burners was designed and made by Mr. Larkin and was shown to be the most satisfactory of the three, but sufficient evidence was lacking to prove the economy of the system. The general feeling was that from what was shown the arrangement would prove of inestimable value to florists in saving of labor and preventing dust when perfected.

The committee on scale of points for judging exhibition flowers made the following report which was unanimously adopted:

Corolla	Form	10
	Fragrance	10
	Size	10
	Shape	10
	Substance	10
Calyx	Integrity	10
Stem	Length	10
	Stiffness	10
General effect		20
		100

Mr. Larkin desired the members who might be intending to go to the meeting of the S. A. F. and to Chicago to endeavor to make arrangements to unite with the party going from Philadelphia and farther east.

E. Swayne showed a new style of trowel for use in hand cultivation for deep culture.

A vote of thanks was extended Mr. and Mrs. Larkin for their kind hospitality.

C. J.

Express Rates Reduced.

We are much gratified to be able to announce that we have received word from Mr. P. O'Mara, the New York member of the S. A. F. committee on express rates, that the matter has been definitely settled at last, and in accord with the views of the committee. The new rule, which went into effect July 1, is as follows:

"Plants: Completely boxed and packed so they can be handled without extra care may be charged for at general special rate. Between points where no general special is in force they may be taken at 20% less than merchandise rate; pound rates, minimum charge 35 cents, prepaid or guaranteed. Plants: Not so boxed and packed, double merchandise rates."

It is difficult to estimate the very great value of this low express rate to the trade as a whole. It will make it possible to lay down plants at their destination with a chance for the recipient to make a profit, whereas in the past in many cases the express charges have eaten up all chance of a profit. The result will surely be a vast expansion of the shipping trade to the mutual benefit of grower and dealer.

In spite of the heavy express charges that have prevailed in the past hosts of florists have found it cheaper to buy certain plants from the large growers, who by making a specialty of same and growing in very large quantities have brought the cost of production down to a minimum, than to grow the plants themselves. Now that the bar of high express charges has been removed florists doing a general trade will find it desirable to still further enlarge their purchases from the specialists and reserve all their own space for stock that can be produced at a better profit at home. And by this concentration of their energies they will themselves become specialists and will be enabled to make their own product of better grade and produce it at a better profit than before.

Specialization is the order of the day. Every trade is being more and more divided into departments and sub-departments, and each sub-division is found to result in benefit. We no longer question the fact that the man who devotes his whole time and attention to the production of young roses can grow them better, and at a less cost, than the man who grows a general stock in which roses are one of many items. It is the same with carnations, chrysanthemums, pansies and all other plants largely used by the trade.

But where the general florist is located at a considerable distance from the specialists the carrying charges have to be deducted from the gain made by specialization. In the past this has been a serious item, but with the new rate now in force the deduction will be so slight that nearly all the gain is preserved, and as a result the shipping trade will surely receive a tremendous impetus therefrom. The new rate means a very great deal to the trade as a whole.

This valuable concession has been obtained only by a great deal of long continued and well directed effort on the part of Mr. P. O'Mara, the New York member of the committee, and that he will have the sincere thanks of every one in the trade for his untiring energy in their behalf goes without saying.

And the Society of American Florists has scored another triumph. It has through its committee successfully solved a problem of direct financial interest to every florist in America. This one concession will be worth more to the trade than the society has cost during its nine years of existence. There is more work to be done. If you are not yet a member join at once and contribute your mite toward the general good.

Miscellaneous Seasonable Hints.

If you do any decorating with palms etc. and you have a number of palms that are as large as desirable, don't keep them in the warm moist house where your young stock is growing. Stand them out of doors, shaded from the afternoon sun if possible, but if in the full blaze of the sun they will take no harm provided you do not neglect the watering. If allowed to get very dry they will burn, especially the latanias. By keeping them out of doors for a few months they will be in much better condition to stand the ordeal they will have to undergo next winter. All the palms exposed to the sun will lose their deep green color, but that matters nothing, for in a few weeks in the palm house they soon assume their healthy natural color. This I have proved a great many times. For want of a better term I will say that what takes place is a restoration of the chlorophyll. Young palms you will of course keep indoors, and encourage to grow at this season. It makes one feel hot to talk about firing when the thermometer stands at 90° in the shade, but with your heavily shaded palm house, you need a little fire on all cool nights, to do the plants justice, and perhaps in this same house you will have some cattleyas, lælias, dendrobiums and other orchids, which will be greatly benefitted by a little fire heat and plenty of circulation.

Don't delay in getting your smilax planted. The middle of this month is late enough. If the surface of your houses is liable to be wet in the winter, then make a floor of plank a few inches off the ground. Eight inches of rather heavy loam with a fourth of rotten cow manure; plant six to eight inches in the row and one foot between rows, and you will easily get four or five crops before next year at this time, but it should not have a lower temperature than 60° at night. If you have to plant Asparagus plumosus this year do it at once.

A VERANDA BOX OF AN UNCOMMON STYLE. IT IS AN ELM LOG WITH THE SPACE FOR PLANTS HEWN OUT, AND FOR COUNTRY VILLAS MOST APPROPRIATE.

It will soon be time to sow pansies for winter bloom. The yellow and purple are the most useful to the florist. Sown the middle of the month in the coolest place you can find they will, if transplanted once, be fine plants to place on the bench by end of September. Sometimes pansies refuse to flower satisfactorily in the winter months. In the dark winter they want the very lightest aspect you can give them, and they will not flower if too cool; 45° at night is low enough if you want them to flower freely.

Don't forget to prepare a bed in your violet house or some other light house where the temperature does not exceed 45° at night for that most useful flower, the mignonette. It can be sown the end of this month and transplanted on the bench later, but it transplants poorly, and it is much better to sow it where it is to flower. In too many places you see mignonette sown and grown as thickly as you would sow a row outside in the garden. Growers of fine mignonette do quite different and get a very profitable price for their grand spikes. Sow on either a solid bench or in six inches of good rich soil in rows eighteen inches apart and when up thin out to one foot or fifteen inches between each plant; this is plenty close enough, and specialists grow the plants much farther apart.

The beautiful Japan lilies, L. lancifolium, rubrum and album, as well as the gorgeous auratum, are just coming into flower, and most useful the former are. They are not "wasting their sweetness on the desert air" by any means, for they are useful for any purpose and a great acquisition at this time. Unless your house is very heavily shaded it will benefit them very much to get them outside in the shade at the north side of a fence or building. Such a place can generally be found, but unless they can be perfectly shaded let them remain under the glass.

Sweet peas have with us bloomed out of doors two weeks earlier than usual and the continued hot dry weather will soon tell on them unless they are mulched and occasionally given a good soaking. Don't mulch with fresh manure; the clippings from the lawn is good enough or an inch or two of old straw, anything to keep the sun from baking the ground. Red spider has troubled sweet peas badly some dry summers. The best remedy is a cheap one, plenty of spraying with hose. Don't forget to sow another row of candytuft about now; it comes in very useful later on. WM. SCOTT.

Buffalo, N. Y., July 3, 1893.

Philadelphia.

The quality of the cut flowers coming to this market is now very poor. All kinds of roses are small and off color. Beauties and Belles are done; Niphetos is the best white, being larger and a better color than Bride, which rose seems to burn very easily from the sun these hot days. Marie Guillot is hardly in good shape as yet, and the La France has such a washed-out, faded appearance that it is hardly salable.

Carnations hold out fairly well, pink and white being the principal colors. Sweet peas are in great abundance and better this season than ever. Every other grower has a lot of smilax he would like to cut out, and the price for any quantity is very low. Pond lilies are being supplied from the Jersey and Pennsylvania swamps, as well as the fragrant magnolia. The latter flower is handled principally by the fakirs, who seem to find ready sale for it.

Roses are selling at from $2 to $4, carnations 75 cents to $1, valley $4, sweet peas 40 to 50 cents a hundred, adiantum 75 cents to $1, smilax 15, asparagus 50.

Business is very light, what little there is being principally funerals and a few late weddings.

The growers are busy planting their houses, some having almost finished. The Bridesmaid is to have a trial here the coming season, as quite a number of growers are planting it in preference to Mermet.

"Wait until you see my carnations next season" is heard from quite a few. We believe the Carnation Society has done a great deal to bring about the improvement that was shown in the carnations the past season. Extra fine carnations from growers who take especial care to have their flowers fine call forth such remarks as "My, those are good, I never saw such flowers, they must be disbudded, I don't wonder I can't sell mine, they are not in it with these," and before long the successful grower finds one man after another dropping in on him to admire his stock and get what points they can about his methods of culture.

Lathyrus latifolia alba, the hardy white pea, is said to be a sport from L. l. rosea and that plants raised from seed of the white variety invariably produce pink flowers.

Bignonia grandiflora seems to be a branch variation of Bignonia radicans, as cuttings from the branches will come true, while root cuttings from the same plant will produce only radicans.

George Anderson says that in making any further additions to his place he shall use galvanized iron nails. He thinks that rusty iron nails have a great deal to do with rotting out the wood about the

greenhouses, and that the trouble would be in a great measure avoided by the use of the galvanized nail, which when imbedded in the wood would be as good as new and would last a lifetime.

The bowlers are particularly requested to be present at the next meeting of the club, when arrangements will be made for practice games so that when St. Louis is reached they will feel that they have a fairly good hold on the string attached to the Spaulding cup. K.

New York.

The account of the overstock and ruinous prices of cut flowers in last week's market report had scarcely got into type before a most remarkable change took place. Everything became suddenly scarce, and prices went up like a rocket. Roses, which had been unsalable at $5 to $10 per thousand went quick at from $4 to $6 per hundred, and carnations and lily of the valley showed a corresponding advance. The cause was the general throwing out of stock by the growers, who had become tired of cutting and expressing a lot of stuff for nothing, and as usual they all did the same thing at once. The scarcity is not likely to last long for the month is the dullest of the year, and the crop from regular summer houses will soon begin to come in steadily. Lily of the valley brings $5 to $6 per hundred, sweet peas from 2 to 8 cents per bunch. The outdoor crop of candidum lilies is beginning to appear. These bring about $5 per hundred stalks.

Millang Bros. will move about July 15, from their present location on W. 27th St. to 17 W. 28th St. They are receiving at present large quantities of Meteor roses from F. R. Pierson Co. which has been a very fortunate strike for them during the late scarcity.

The trustees of the New York Florist Club held a meeting on Monday last, at which the contracts for the holding of a chrysanthemum show at the Grand Central Palace next November were completed and signed, and the growers can now go ahead and get ready for the exhibition. A significant fact in connection with the meeting was that every member of the board of trustees was present.

Mr. F. Sander and wife, and Mr. W. J. Palmer of Buffalo, sailed for England on the Campania on July 1. Auctioneer Wm. Elliott also sailed on the same day per steamer Alaska.

The committee on transportation from New York to St. Louis are making progress, and hope soon to be able to report a satisfactory arrangement.

Boston.

The annual presentation of bouquets to the graduates of the public schools by the city of Boston took place on Saturday, July 1, and marked the close of the season for the florists. Flowers have been scarce during the week, roses especially so, and the demand for flowers for graduation exercises has driven the price up to about double what it was two weeks ago.

On Saturday, July 1, also occurred the first of the regular free weekly exhibitions of the Mass. Horticultural Society. On this occasion the hall was filled and the display was exceedingly fine. Roses were shown in great quantities, the quality rather excelling that of those shown at the regular rose exhibition a week previous. Among the novelties was a seedling H. P. rose, "Michael Walsh," raised and exhibited by M. H. Walsh, gardener to Hon. J. S. Fay of Wood's Holl. The flower is large, full and deep glowing crimson in color. A certificate of merit was awarded for it.

Notable visitors of the week to Boston have been Messrs. Vilmorin of Paris and Nicholson of Kew Garden, England, both on their way to Chicago. They visited, as does everybody nowadays, the Arnold Arboretum and spent a few hours among the trees and shrubs. One of the most beautiful shrubs now in bloom there and in a few private gardens hereabouts is the comparatively recently introduced Ligustrum Ibota. It is impossible to exaggerate the beauty and symmetry of one of these plants in bloom. For decorative cut flower work the long slender branches are particularly adapted, and there is no reason why it would not make a profitable forcing shrub.

Chicago.

Trade is rather quiet at present, and this week's holiday would not tend to improve it. Roses are rather better in quality, and will continue to improve as the young stock comes into bearing. Carnations are still very plentiful. There is now a glut of sweet peas; although this flower is very popular the market is overloaded and they are now sold by the thousand at very low prices. Cornflowers are also selling at low rates, though the flower is well liked. Some good gladiolus is seen and it continues to increase in quantity; the price is good. Very fine Lilium auratum is in, and quite a good deal of it; the price averages the same as for callas. We are told that orchids have sold very well during the past two months; the market for them is still limited, but it is constantly increasing in a very encouraging manner.

Geo. Klehm has given up his retail store and has come into the Exchange in the wholesale commission interest.

A new firm in the Exchange is John B. Demud & Co. This firm has rented three tables, and will handle all of O. P. Bassett's stock. Space in the Exchange is almost all taken now.

At the last meeting of the Horticultural Society, held July 1, no business was transacted, as there were not sufficient members present to make a quorum.

Among recent visitors were A. R. Reineman and wife, Allegheny City, Pa., Miss Emily Dorner, La Fayette, Ind.; G. Van Bochove, Kalamazoo, Mich.; Wm. Joy, Nashville, Tenn.; Chas. Connon's two sons, St. Louis; W. Ellison, St. Louis; Andrew Bather and family, Clinton, Ia.; Robert Hausperger, Jr. and brother, St. Louis; Miss Leslie, Keokuk, Ia.; George Mann, Keokuk, Ia.; L. A. Casper, Council Bluffs, Ia., John B Romans, Columbus, Ohio; J. T. Temple, Davenport, Ia.; E. M. Harwood, Shelbyville, Ill., H. L. Sunderbruch, Cincinnati, Ohio; F. B. Tinker, Peru, Ind.; Miss K. O. Sessions, San Diego, Cal.

Buffalo.

Last week was what is strangely called commencement week with the schools, academies, etc., and in spite of the edict that no flowers are allowed on the stage to be presented to the graduates yet the demand for roses was far greater than the supply, and many a bunch of Mermets was sent out that in winter would have graced the refuse barrel. There were several society weddings also, which helped to make business lively. It was I am afraid the last dying flutter of the season. Having graduated, married, gone to Chicago or the seashore, there will be a serious drop in business now on for a few months.

Mr. C. F. Christenson, W. Belsey and James Buxton have been paying our Canadian friends a visit. They were delighted and amazed with the extent and system of the rose growing establishments of John Dunlop and Harry Dale. Mr. Christenson, who seldom leaves home, seemed particularly fascinated with the "short span to the south" system, which he saw on an extensive scale at Mr. Dunlop's. There has been much said and written about this fad, but risking being called down by some heavy weights I venture to say now that like that biggest of humbugs, overhead heating, it is but a fleeting fancy and will quickly pass away never to be resurrected in this generation.

Mr. Goldring, of England, and more recently of India, brother of the Messrs. Goldring, of Albany, N. Y., honored us with a very short visit on Saturday, in company with his brother "Sam." Mr. Goldring has just returned from India, where he has been laying out some grand places for some of the native princes, Maharajah Duleep Singh, or his cousin, I forget which. Mr. Goldring is one of England's foremost landscape gardeners, as well as being a horticultural author of wide renown. It was gratifying indeed to hear such unstinted praise of our beautiful park and matchless resident streets from such a travelled man, and I regret that time forbid him to have a chat with our only "Mac." Hardy trees and shrubs would have been flying in all directions then.

Mr. Dan Long returned from Chicago with anything but a complimentary message from James Dean, directed to the florists of Buffalo, and W. S. in particular. We could not stand that, so Mr. Long and a few others set right about it and Saturday saw the departure of a good many boxes of plants for Mr. Dean's use, and more are to follow. May they be useful we sincerely hope. There is an utter absence of private establishments in this vicinity, and the florists thought they had nothing worthy for the occasion. W. S.

St. Louis.

During the past week the summer season has finally fastened upon us, and under its sway things are about as dead as they possibly can be. There is still quantities of stuff coming into market with no demand worth speaking of, and the wholesalers are anxiously waiting for replanting to shorten up the supply to a moderate quantity.

It is strange to notice at this time of dullness the difference in the stores as shown in the arrangement of the windows. At some places there is nothing to show the passers-by what is inside except probably a vase or two of carnations, and certainly nothing to tempt any one to wish to purchase. In contrast to this may be seen windows that are as carefully arranged as at any time during the winter season. The flowers used may not be of as good quality or as high priced, but they show taste in arranging and evince a desire to attract and please possible customers. Such a window seen recently was almost filled with long stemmed "tiger lilies," while vases of sweet peas, heliotrope, carnations, and the usual run of summer flowers, showed that some interest was taken by the owner in having things attractively arranged.

The contrast thus noted must have its influence on customers. When a party

wishes anything and is not in the habit of buying regularly what is more natural than to go to the store where they remember having always seen something attractive displayed. This is not enough thought of by all florists and would be a pleasant change if more generally adopted.

Mr. Julius Koenig returned last week from Washington, where he went to see his son Otto, who with Mr. Lacy, under the firm name of Koenig & Lacy, have bought out J. M. Miller & Co., and propose to continue the business upon the same lines as it has been run, adding, however, by making a bid for cemetery work in the two large cemeteries which lie close to their greenhouses. All friends in St. Louis wish the young men success.

A regular team has been selected from the bowling club and is being worked twice a week under the watchful eye of Capt. Helwig. Arrangements are about complete for the alleys and all interested are doing everything to make the tournament a success. R. F. T.

Toronto.

The committee on the floral arrangement competition at the World's Fair met on Monday last. Much regret was expressed that the association could not see its way to offer a trophy or a money prize, but owing to the present exceedingly low state of the funds and many expenses ahead it was deemed advisable to act with caution. The preliminary schedule was carefully gone over and discussed and the secretary ordered to make two or three suggestions to the chairman of the Chicago committee.

Magenta pink and scarlet geraniums planted in too close proximity are again to be seen this year. I will not mention name and place, but it is to be seen in a garden much patronized by the public. Any man who will put these two colors together in these days must be past redemption. This is the third time I have had occasion to refer to this matter in as many years. Please don't let it occur again.

Rosierists are seldom seen away from their own places these days, being busy tearing out and replanting; with all their new glass it keeps them hustling. The florists' rush is over, holiday season has commenced and business is dull.

No reduced fares to the World's Fair yet, but the railways seem to be making money, at least the Grand Trunk have a big increase this year over the same period last year. I suppose when the upper ten get through the common people will be given a chance.

Beautiful summer weather now, not too hot. E.

BETHLEHEM, PA.—Geo. Charmon is erecting a new rose house 160 feet in length.

CATALOGUES.—Peter Nelson, florist, 1918 South 11th St., Omaha, Neb, wishes trade catalogues sent him.

NEW ALBANY, IND.—Thos. Crawford & Son have a night blooming cereus that is 37 years old. The plant is now in bloom and has 12 buds in addition to 4 open flowers.

ST. JOSEPH, MO.—Mr. Kidd, of the Kansas City firm of Newell & Kidd, has moved here and will conduct the Hans Nielson greenhouses, recently leased by the firm for a term of five years. They will retain their Kansas City store which will be largely supplied with cut flowers from the greenhouses in this city.

KANSAS CITY, MO.—We regret to announce the death of Mr. Thos. C. Ingram, florist and landscape gardener, of this city. Mr. Ingram was born in Torquay, County of Devon, England, in the year 1821. Coming to the United States in 1876 he engaged in the raising of cotton and stock in the state of Mississippi; this, however, did not prove a successful venture and he removed to Kansas City, Mo., to engage in the florist business, for which he had a great love, having followed it from his early youth. As a grower of flowers he was very successful and his landscape work in the parks of Kansas City were the source of much attraction and comment. His many friends will grieve at his loss; to them he was a genial companion and true friend. He leaves a widow and four children to mourn the loss of a kind husband and father.

DO YOU WANT an alphabetical list of the chrysanthemums in commerce in America, with class and a brief accurate description of each one, and synonyms noted? You will find such a list in our trade directory and reference book.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—As gardener, in Chicago. Address T M, care Am. Florist, Chicago.

SITUATION WANTED—Would either work for wages or a per cent of profit. For particulars address GROWER, care American Florist.

SITUATION WANTED—By young man as florist or cut flower artist; 11 years experience. Good references. Address A. N. DEW, Lansing, Mich.

SITUATION WANTED—Position as foreman; first-class rose grower and propagator of florist stock of the first quality. Can make up decorations, etc. E F G, care American Florist, Chicago.

SITUATION WANTED—By a single man; has had 12 years' experience growing orchids, stove plants, ferns, etc. Private or commercial. JOS. DUMAS, Morgan House, Irwin Ave., Allegheny, Pa.

SITUATION WANTED—By experienced florist (grower) as working foreman. Thoroughly competent in rose and cut flower growing; age 26. Best of references. Address H, box 362, Arlington, N. J.

SITUATION WANTED—By a German gardener and florist; single, age 32; speaks English; in large commercial place in or near Philadelphia. Good all-round man. References if necessary. Call on or address GARDENER, 463 N. Third St., Phila., Pa.

WANTED—Young man, as assistant florist. State wages expected, including board. GEO. SOUSTER, Elgin, Ill.

WANTED TO RENT—Greenhouses, from 10,000 to 15,000 feet. Must be in good condition. Address B, care American Florist, Chicago.

WANTED—At once; young florist, by a progressive firm, on a modern place where 10,000 feet of glass has just been added. Address BOOL FLORAL CO., Ithaca, N. Y.

WANTED—A single man with some experience in greenhouse work. Address JOHN B. GOETZ, 2165 Mackinaw St., Saginaw, West Side, Mich.

WANTED—A thoroughly competent man to take charge of my greenhouses. One who understands the growing and forcing of roses, carnations, violets and bulbs. Married man preferred. MRS. GEO. R. FRAVELL, Marion, Ind.

WANTED—An active partner with a cash capital of $5,000 to take a half interest in a flower and seed business in a town of 25,000. The prospect can not be equalled in America. A large tract of country with numerous towns and villages is tributary. Competition as yet of no account. Particulars will be given on application to NORTH WEST FLORIST, care American Florist, Chicago.

FOR SALE—Hall steam pump and boiler—both new. $115.00 on cars here. Call or address JAS. DAUGHERTY, box 17, Madison, N. J.

FOR SALE—Hitchings corrugated fire box boiler No. 15; heats 600 feet 4-inch pipe. Price $30.00. Address W. A. WETTLIN, Hornellsville, N. Y.

FOR SALE—New hotbed sash. Georgia Pine, unglazed, 3x7, primed. f. o. b. $1.00 each. Cash with order. DARLINGTON BROS., Morristown, Tenn.

FOR SALE—One Dewine boiler No. 5 and 225 feet of 4-inch pipe, in first-class condition. Price $75.00. Write for particulars. Address ARTHUR ELLIOTT, Baraboo, Wis.

FOR SALE—The greenhouses, stock and good will of the old established florist business of the late T. C. Ingram. Terms reasonable. Address ALFRED HAMLIN, 1011 St. Louis Ave., Kansas City, Mo.

FOR SALE—My retail florist business at 897 and 899 W. Madison street, Chicago. Completely stocked with supplies and plants. Good horses, wagon and every thing that a first-class store needs. 42 ft. frontage of large show glass. This is no run-down business but one of the best paying in this city. Cause for selling, too much other business. Apply to T. J. CORBREY, 45 Lake St., Florists' Exchange.

FOR SALE CHEAP—Four second-hand boilers, with grate bars, front, etc., complete. 1 steam fire-box boiler, size 7½ ft. long, 3 ft. in diameter, 18 3-in. flues. Original cost $240; price $75. 1 Saddle boiler, hot water, size 9 ft. long, diameter 34 inches, 23 3-in. flues. Original cost $200; price $75. 1 hot water, size 5 ft. long, 2 ft. in diameter, with 24 3-in. flues, (a great heater); price $30. 1 hot water, size 5 ft. long, 26 inches in diameter, with 20 2¾-inch flues; price $35. 5,000 ft. 4-inch water pipe in 5, 10 and 15 ft. lengths, connected with red lead packing, at 7c. a foot. 50 4-inch elbows, at 15c. each. 50 4-inch tees, 15c. each. Above boilers heated over 20,000 square feet of glass (old houses), with thermometer frequently 30 degrees below zero. Above prices f. o. b. at La Crosse. JOHN A. SALZER SEED CO., La Crosse, Wis.

RARE OPPORTUNITY.

Live business, known over four states as a successful place, elegantly located, five county seat, 21 acres, rich soil, 3 steam greenhouses, 8-room dwelling, large barn, other buildings; own gas well, no cost for fuel; own water works, choice fruits. Good reasons. Will trade for improved farm. Particulars cost nothing; write. Barnes' Garden, box 86, Independence, Kans.

FOR SALE.

Good will and list of about 10,000 names of a prosperous shipping business.

Address **Thos. A. McBeth & Co.,** SPRINGFIELD, OHIO.

FOR SALE.

The well known commercial establishment of W. L. Smith, Aurora, Illinois. Plant consists of fifteen greenhouses, one, two or six acres of land. Houses all in good repair and splendidly stocked. Immediate possession. Address **W. L. SMITH, Aurora, Ill.**

FOR SALE—HALF COST.

Three greenhouses 50x12 each, built in '88, on large lot in town, with 28 sashes, new; frames, tools, pots, large winter select stock of carnations, bouvardias, violets, chrysanthemums, asters, etc., etc.; heated with Meyers' new hot water boiler; good local trade in town of 4,000; new depot, 6½ miles from Phila.; 1 year established stand in largest market in Phila. Party has business in Scotland. $1,000—$400 down, rest on mortgage. **FLORIST, care Moore & Simon, 149 N. 4th St., Phila.**

FOR SALE.

We offer our greenhouses and label business for sale, including the land on which the greenhouses stand. For information, inquire at the office of

H. W. WILLIAMS & SONS, BATAVIA, ILL.

FOR SALE.

The Oldest Seed and Florists' Stand in New Orleans

on account of retiring from store business, a large selected stock and good patronage from the best class of customers in the city. Address

R. E. SIMONS, NEW ORLEANS, LA.

TO MUSHROOM GROWERS:

Those intending to try this new **Money Making Crop** will hear of something to their advantage by addressing the undersigned. Send postal at once for circular. **G. C. WATSON,** Wholesale Seedsman and Commission Merchant, 1025 Arch St., PHILADELPHIA.

FOR SALE OR TO RENT.

The following greenhouse property, situated on the outskirts of Springfield, the City of Houses; or will sell Greenhouses, Stock and Fixtures and give ten years' lease of 2 acres land. Ten houses in all—5 houses, 10 feet wide, 65 feet long; 4 houses, 18 feet wide, 65 feet long; 1 house, 18 feet wide, 65 feet long. Steam plant 1 New double Florida Boiler. Stock in good condition, with a large and extra good home market. This is an opportunity in a life-time, as present owner has other interests to look after. If you are looking for a chance, apply at once to **N. D. WINTER,** 5 Elm Street, SPRINGFIELD, MASS.

As It Appears Through Four Eyes.

The time for excursions, picnics and conventions is at hand, and to make these occasions successful somebody has got to work. In all such cases it is well known that the heavy work devolves on one or two individuals. And with what result? Do they get thanked for their neglect of their own interests for the sake of other people's comfort? Well—hardly ever. Their activity is promptly attributed to a desire for notoriety. They are a clique, a ring, they must be squelched. And the most active of their critics are apt to be the individuals who never do much of anything themselves. As a rule we do not mean to be unjust, but we are thoughtless. Let us think twice before condemning. All men have faults, but those who will sacrifice their own interests for the pleasure of their fellows are so rare that this one good quality alone should atone for a multitude of minor failings. Encourage your committees and support your officers in their duties, avoid unnecessary criticism and fault-finding and let them understand that their work is appreciated.

The various sub-divisions of horticulture have made such progress in recent years, each on its own special lines, that it is no longer possible to group them under one head and do full justice to all. The man who understands the needs of each of these great sub-divisions sufficiently well to maintain perfect harmony and to make an entire success of the department does not exist. The landscape gardener and the florist find themselves in congenial company with the painter and the sculptor, but find the space which divides them from the market gardener and the fruit tree grower rapidly widening. Between the man who aims to feast the eye and gratify our esthetic taste and the man whose object is the production of food for our physical body there is really but little in common, for they are working on widely divergent lines. Even floriculture itself has come to include a number of widely different interests. The arrangement for artistic effect of trees, shrubs and plants in a landscape, of plants and flowers in indoor decoration, or of cut flowers alone in vases or designs, calls for abilities far different from those required for the skillful cultivation of such things. It is unfortunate that a more comprehensive title than floriculture can not be found to properly designate the great combination of interests which it is understood to comprise.

KENNETT SQUARE, PA.—Mr. C. J. Pennock has been in poor health since February, but is now around again and was in attendance at the last meeting of the Chester County Carnation Society.

DAYTON, O.—The Highland Floral Co., of which John Mull is president, H. C. Thomson treasurer, and H. M. Altick secretary, have purchased 6½ acres of land a mile north of the city and are building eight 100-foot houses on same. Mr. E. C. Bissell, formerly of Richmond, Ind., is now in the service of this Co.

ROCKFORD, ILL.—Mrs. M. H. Cline has sold her interest in the Auburndale Greenhouses to Graves & Cameron. The business will be carried on by Mrs. M. J. Cameron. Mrs. Cline has removed to Birmingham, O.

WATER HYACINTHS,
$1.00 a dozen; $4.00 a hundred.
WATER POPPIES, 75 cts. a dozen.
MRS. A. E. DAVIDSON, Terry, Hinds Co., Miss.

PLANTS OF
Asparagus plumosus
STRONG 3-YEAR OLD ROOTS.
Just the kind for making strings in a hurry. Large enough to divide up and still have big plants.
$10.00 PER DOZEN; $75.00 PER HUNDRED.
JOHN BURTON, Chestnut Hill, Philadelphia.

FORCING ROSES. Good Stock . . . 3 AND 4-INCH POTS.
AMERICAN BEAUTY, BRIDE, MERMET, BRIDESMAID, METEOR, PERLE, SUNSET, GONTIER, LA FRANCE.
A. S. MacBEAN, Lakewood, New Jersey.

ROSES.
TEAS . . . . . $30.00 per 1000
HYBRIDS . . . . . 40.00 per 1000
Healthy plants, in 2-inch pots.
Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.
Trade list on application.
Jacob Schulz,
LOUISVILLE, KY.

ROSES.
PERLE, SUNSET, MERMET, BRIDE, GONTIERS, NIPHETOS, $10 00 per hundred.
CLIMBING PERLE, $12 per hundred.
All first-class 4-inch stock.
GEO L. PARKER, Dorchester, Mass.

Asparagus Plumosus Nanus,
from 4-inch pots, fine stock.
Per hundred . . . . . $ 32.50
Per thousand 300.00
50 at 100 rate, 250 at 1000 rate.
1000 SMILAX to spare, from 2½-inch pots, at $2.00 per 100; $18.00 per 1000.
THEO. BOCK,
Miami Street, HAMILTON, OHIO.

Surplus Celery Plants
at $1.00 per thousand. Grown by the largest grower in America.
200,000 WHITE PLUME,
200,000 HARTWELL Perfection,
200,000 GIANT GOLDEN HEART,
200,000 GIANT PASCAL.
Now Ready.
JOSEPH DUNKLEY,
622 Pearl Street, Kalamazoo, Mich.

Celery Plants.
2,000,000 WHITE PLUME, $1.25 per 1,000. Cash with order. Samples mailed free upon application.
C. M. GROSSMAN, Wolcottville, Ind.

PREPARE NOW FOR OUR CONVENTION NUMBER AND COLUMBIAN SOUVENIR.

Hybrid Perpetual Roses,
Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.
Price Lists to applicants. Address
WILLIAM H. SPOONER,
JAMAICA PLAIN, (Boston), MASS.

THE ANCHORAGE ROSE CO.
Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.
SEND FOR PRICE LIST. . . . . .
ANCHORAGE ROSE CO., Anchorage, Ky.

CHRYSANTHEMUMS.
2½ inch, $4 per 100.
SMILAX—1st class, from 2½ inch pots, $2.50 per 100; $20.00 per 1,000. Samples free.
Address J. G. Burrow,
FISHKILL, N. Y.

PYRETHRUM ULIGINOSUM. (Hardy.)
The Daisy that blooms in the Fall. Plants in 3-inch pots, $5.00 per 100.
CHRYSANTHEMUMS,
All the leading kinds for cut flowers; in thumb pots, $5.00 per 100; $25.00 per 1000. My selection.
EDWIN LONSDALE,
WYNDMOOR Station: Chestnut Hill P. O., PHILA.
on Phila. & Reading R. R. from 12th & Market Sts.

—Prices Further Reduced—
CAPE COD PINK POND LILY.
For price list, Plants and Cut Flowers, address the original cultivators,
Chipman Bros.,
SANDWICH (Cape Cod), MASS.

SMILAX
FOR WESTERN FLORISTS.
A few thousand **extra strong** 2-inch Smilax plants at $2.25 per hundred.
Cash with the order.
BYRON H. IVES,
ALBUQUERQUE, NEW MEXICO.

SURPLUS STOCK AT HALF PRICE.
2000 FANCY-LEAVED CALADIUMS,
Fine 2½-inch pot plants..... ..... at $5.00 per 100
BLUE AFRICAN WATER LILY,
From seed pots .... at $1 00 per 12
Larger plants cheap. Other Aquatics very cheap.
Address for 10 days
F. J. ULBRICHT,
P. O. box 655. ANNISTON, ALA.

BRIDESMAID.

Fine 3-inch plants at $9.00 per 100. Planters need have no fear of this rose sharing the fate of Waban, as it has proved itself a first-class rose. Some of the larger growers are planting it freely.

Meteor, Perle, Sunset, Gontier, Mermet, Bride, Hoste, and other forcing Roses now ready for planting, from 3-inch pots at usual prices.

M. A. HUNT, Terre Haute, Ind.

Some nice

WATTEVILLE

and

BRIDESMAID

plants left.

Please write, stating how many you want, and I will quote you a bargain.

FRANK L. MOORE,

. . . CHATHAM, NEW JERSEY.

ROSES

	Per 100
American Beauty, 2½-inch	$6.00
Bridesmaid, 2-inch	8.00
White La France, 2½-inch	5.00
Perle des Jardins, 2½-inch	4.00
Bon Silene, Waban, Mermet and Mme. Pierre Guillott, 2½-inch	4.00

The following sorts from 2-inch pots, $3.00 per 100.

Golden Gate, May Rivers, Cels, Aurora, Mrs. C. Kuster, H. M. Stanley, Marie Sisley, Sus. Blanchard, Jules Finger, John Fremont, and many others.

BOUVARDIAS, all colors. . . $4 per 100; $35 per 1000.

CHRYSANTHEMUMS, the cream of sorts, $4 per 100; $35.00 per 1000.

SMILAX, $3.00 per 100.

Also a full amount of stove and bedding plants. For prices address

NANZ & NEUNER,
Louisville, Ky.

SURPLUS STOCK

Forcing Roses, 2½-in. stock.

AMERICAN BEAUTY
PERLE
MERMETS
LA FRANCE
WHITE LA FRANCE
GONTIERS
METEORS
} 20,000

8,000 SMILAX, nice stocky plants.

Prices on application. Will sell cheap.

J. B. HEISS, Dayton, Ohio.

Vaughan's Solid Steel Trowel.

THE BEST IN THE WORLD.

NEVER WEARS OUT.

Price, 50c.; by mail, 60c.

VAUGHAN'S SEED STORE,
NEW YORK, 26 Barclay Street. CHICAGO, P. O. Box 688.

ROSES. ROSES.

STRONG FIELD GROWN PLANTS; VARIETIES SUITABLE FOR FLORISTS' USE. LARGELY

GEN. JACQUEMINOT, MRS. J. H. LAING, ULRICH BRUNNER, MAGNA CHARTA, Pr. CAMILLE DE ROHAN, PAUL NEYRON, MARSHALL P. WILDER, ANNA DE DIESBACH, ALFRED COLOMB, ETC., ETC.

A FULL ASSORTMENT OF MOSS AND HARDY CLIMBERS.

TREE ROSES.

A splendid stock, fine smooth bodies, strong two year heads.

Our usual complete assortment of Trees, Shrubs, Bulbs, Plants, Etc.

CORRESPONDENCE AND INSPECTION INVITED.

THE STORRS & HARRISON CO.,

PAINESVILLE, OHIO.

30,000 FIRST QUALITY FORCING ROSES.

READY FOR IMMEDIATE PLANTING.

Fully equal to those sold last year, and perfectly healthy in every respect.

LA FRANCE, 3-inch pots, $9.00 per hundred; 4-inch pots, $12.00 per hundred.

SOUV. DE WOOTTON, MERMET, BON SILENE, MME. HOSTE, PERLE DES JARDINS, BRIDE, SAFRANO, MME. CUSIN, 3-inch pots, $7.00 per 100; 4-inch pots, $10.00 per 100.

SMILAX. Strong plants, 2½-inch pots, $2.50 per hundred; $20.00 per thousand.

J. L. DILLON, Bloomsburg, Pa.

ROSES

All the leading and popular kinds for winter blooming, in 3-inch and 4-inch pots. . . .

SEND FOR PRICES.

Edwin Lonsdale,
WYNDMOOR, near Chestnut Hill,
PHILADELPHIA.

ROSES.

Fine healthy stock. Per 100 P. 1000

Perles, Mermets, The Bride, Sunset, Papa Gontier, Niphetos, Bon silene, La France, Souv. d'un Ami, Duchess of Albany, Mad. Cusin, Mad. de Watteville, from 3-in. pots, $8.00 $75.00

SMILAX, from 2¼-inch pots. 2.50 20.00

Lots of other Fine Stock.

Send for new list.

WOOD BROTHERS,
Fishkill, N. Y.

ROSES

For Forcing.

CHOICE STOCK.

PERLES, BRIDES, LA FRANCE, etc., per 100, $5.00; per 1000, $45.00.

ROMAN HYACINTHS, July 10.

VAUGHAN'S International Pansy Mixture, ready August 1, is a World Beater.

J. C. VAUGHAN,
146 & 148 West Washington Street, CHICAGO.

ROSES,

STRONG PLANTS,

WRITE FOR PRICES.

Kemble Floral Co.,
OSKALOOSA, IOWA.

Always mention the AMERCAN FLORIST when writing to advertisers.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

Our Annual Convention Number.

In our Convention Number for 1893, which will also be a Columbian Souvenir as well, we shall repeat the plan of identification by portraits as inaugurated at the Convention in Washington last August. This plan solved the identification problem with such general satisfaction and was so generally made use of that we believe no explanation of its workings is now necessary.

Are you a member of the Society of American Florists? If so, do you expect to be present at the Convention in St. Louis next August? If not now a member do you expect to join while at the St. Louis meeting? If so, and you were not represented among the portraits given in our Convention Number of 1892, please send us a cabinet size photograph of yourself, being careful to write your name and address plainly on back of same. If you have no recent photograph, have one taken now, and send us a copy as soon as ready. If you intend to take your wife with you to the convention (and you ought to do so if possible) send us a copy of her photograph also, as our identification plan includes the ladies too. But do not send us photographs that must be returned. We have to cut them to get them into groups and of course the photos are spoiled thereby.

This number will contain in addition to the portraits and indexes to same, a complete guide, *at date*, to the Horticultural Department of the World's Columbian Exposition at Chicago, which will certainly be visited by all members of the Convention after the adjournment of the St. Louis meeting. Diagrams of each section of the Horticultural display will be given and the location of each exhibit plainly indicated so it may be quickly located by any one. These will be accompanied by an alphabetical index to exhibitors and a classified list of exhibits, each referring to position on the diagrams; together with fine half tone plates of special features.

Full details regarding the great Horticultural Congress will also be given in this number, and it will be such a "Columbian Souvenir" as you will want to preserve for all time.

WE request subscribers to make remittance by draft or money order when renewing subscriptions, and to keep a record of the numbers and dates of same. This is to guard against losses in the mails.

WHEN YOU arrive in Chicago make it a point to at once register your name and hotel in the book kept for the purpose at the headquarters of the Chicago Florist Club, 45 Lake st.

Asparagus Plumosus Nanus.

CUT STRINGS: 6 to 10 feet long, 50 cents each. 12 to 18 feet long, $1.00 each.

In large or small quantities all the year round. The largest stock in the country.

W. H. ELLIOTT, Brighton, Mass.

We are the People!
Who? KOFFMAN,
Where? WALDEN, Orange Co., N. Y.
What? **SMILAX**

25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.

When? ALL THE YEAR AROUND.

Also Adiantum Cuneatum Fronds At $1.25 per 100.

And he pays the Express.

HARDY CUT FERNS

LAUREL FESTOONING, ETC.

The only place in the world where you can **Always** get them,

H. E. Hartford,
18 Chapman Place, BOSTON, MASS.

DO YOU USE FERNS?

Finest and Cleanest in the Land.

Hardy Dagger Cut $1 per 1000.

G. W. CURREY & CO.

Give us a trial NASHVILLE, TENN.

Mention American Florist.

LITTLE'S ANTIPEST.

— A —

Valuable Discovery of the 19th Century.

SILVER MEDAL AWARDED

— BY THE —

CALIFORNIA STATE FAIR OF 1890.

This preparation is a sure destroyer of the **Scale, Wooly Aphis** and **Insect Pests** of any and all descriptions. It may be as freely used in the conservatory, garden and greenhouse as in the orchard or vineyard. It is non-poisonous and harmless to vegetation when diluted and used according to directions. It mixes instantly with cold water in any proportion. It is **Safe, Sure** and **Cheap.** No fruit grower or florist should be without it.

Send for Circulars and Price List.

R. W. CARMAN, General Agent,
291 AMITY STREET,
FLUSHING, Queens, Co., N. Y.

CHOICE SWEET PEAS

Being the largest growers of the above in the world the trade are invited to send a list of their requirements and secure low prices for Fall delivery.

SHERWOOD HALL NURSERY CO.
Menlo Park and San Francisco, Cal.

WHOLESALE FLORISTS

La Roche & Stahl

N. E. CORNER 13th & Chestnut Sts., PHILADELPHIA.

SAMUEL S. PENNOCK,
Wholesale Florist

REMOVED TO REAR OF 42 S. 16th ST., Philadelphia, Pa.

WISCONSIN FLOWER EXCHANGE,

131 Mason St, MILWAUKEE,

WHOLESALE

Cut Flowers AND Florists' Supplies,

BULBS, ETC.

Chrysanthemums.

Best for florists' use. New of 1892.

HARRY BALSLEY,
EDWARD HATCH,
GEO. W. CHILDS,
MRS. ROBT. CRAIG,
MR. HICKS ARNOLD,
JOHN H. TAYLOR,
ROSLYN,
Per 100, $5 00.

100 plants, 10 to 20 choice standard varieties, our selection, $3.00.

100 plants, best of '92 and standard sorts in equal quantity, our selection, $4.00.

Miss Kate Brown, new early white, per 100 $5 00.

NIVEUS.

The grand prize winner of the year, per dozen $4.00; per 100 $25 00.

Prices of other new varieties on application.

Address NATHAN SMITH & SON,
167 W. Maumee St.,
ADRIAN, MICH.

JULIUS TESMER & CO.

Manufacturers of all kinds of

Ice Boxes

AND STORE FIXTURES,

937 to 943 N. Western Ave., CHICAGO.

CUT SMILAX,

15 cts per string till November 1st. Quality first-class. Special attention to orders by wire.

J. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.

	Per 100
Perle, Gontier, Niphetos	$3.00@$4.00
Mermets, La France, Bride	4.00@ 5.00
Meteors	6.00
Carnations, short	1.00
" long	1.50
Valley, Tulips, Narcissus	2.00@ 3.00
Adiantum	1.00
Callas, Harrisii	8.00@12.00
Smilax	16.00@18.00
Paeonias	6.00
Asparagus Plumosus	50.00

In effect till next issue of this paper.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
126 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.; Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange.
45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY,
Wholesale and Commission
FLORIST,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

A. G. PRINCE & CO.,
Wholesale and Commission
FLORISTS,
45 LAKE STREET,
In Chicago Cut Flower Exchange. CHICAGO.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

Wholesale Market.

Cut Flowers.

NEW YORK, July 4.

Roses, Gontier, Perle, Niphetos	2.00@ 3.00
" Mermet, Bride, Hoste	3.00@ 6.00
" Cusin, Watteville, Meteor	2.00@ 4.00
" Meteor, Bridesmaid, La France	4.00@ 8.00
" Beauty	5.00@20.00
" Testout	8.00@10.00
Gladioli	4.00@ 6.00
Carnations	1.00@ 1.50
Valley	5.00@ 6.00
Sweet Peas, per 100 bunches	3.00@ 8.00
Mignonette	1.00
Candidum lilies, stalks	5.00
Adiantums	1.00
Smilax	12.00@15.00

BOSTON, July 4.

Roses, Niphetos, Gontier	2.00@ 3.00
" Perle, Sunset	3.00@ 5.00
" Bride, Mermet	4.00@ 6.00
" Jacq., Hybrids	4.00@ 8.00
Carnations	1.60@ 1.50
Lily of the valley	3.00@ 4.00
Peas	.10@ .25
Spiraea	1.00
Ivy leaves	.50
Adiantum	1.00
Smilax	12.00@15.00
Asparagus plumosus	50.00@100.00

PHILADELPHIA, July 4.

Roses, Tens	2.00@ 4.00
Carnations	.75@ 1.00
Valley	4.00
Sweet peas	.35@ .50
Smilax	15.00
Asparagus	50.00

CHICAGO, July 4.

Roses, Perles, Niphetos Gontier	3.00
" Mermet, La France, Albany	4.00
" Bride, Wootton, Bennett	4.00
" Beauties	10.00@18.00
Carnations, short	.50@ .75
" long	1.00@ 1.50
" fancy	2.00
Callas	10.00
Sweet Peas	.25@ .50
Gladiolus	10.00@15.00
Auratum	10.00
Smilax	15.00
Adiantum	1.00

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

J. F. McGillicuddy & Co.
WHOLESALE FLORISTS,
JOBBERS IN . . .
. . FLORISTS' SUPPLIES,
FLORISTS' VASES.
METS,
BRIDES,
GONTIERS,
CARNATIONS,
ALWAYS ON HAND.
1 Music Hall Place,
BOSTON, MASS.
HORTICULTURAL AUCTIONEERS. . .
Mention American Florist

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., BOSTON, MASS.
Mention American Florist.

SEND FOR A COPY
OF OUR
TRADE DIRECTORY
AMERICAN FLORIST CO., CHICAGO

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
THE FINEST ROSES AND CARNATIONS.
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE
FLORIST,
1122 PINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STEET,
St. Louis, Mo.

The Seed Trade.

A.M. SEED TRADE ASSOCIATION.

J. C VAUGHAN, Chicago president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1893. Applications for membership should be addressed to Wm. Megatt, chairman membership committee, Wethersfield Conn.

ALARMING REPORTS are at hand as to condition of the pea crop in northern New York and Canada; continued drouth following backward and wet planting time has dwarfed the growth and unless early rain occurs the crop will be very light.

A FEW Bermuda grown Roman hyacinths have arrived in New York. It is not yet known how well they will compare with the French stock when forced. Early shipments of the latter are expected about the 10th.

THE Bateman Manufacturing Co. succeeded E. S. & F. Bateman, Grenloch, N. J., July 1. The personnel and conduct of the business will remain as before.

THE Mathieson Thomson Seed Co. have opened at 52 Randolph St., Chicago.

OGDENSBURGH, N. Y.—Thomas Lawrance, the florist, died June 27, of chronic laryngitis, aged 64 years. He was born in England and came to America in 1853. His wife and eight children survive him. Mr. Lawrance was a much respected citizen and he received and merited the confidence of his fellowmen. His life was upright and his reputation for integrity was absolutely unsullied.

OWOSSO, MICH.—John S. Schleider has added two new houses, each 16x60, one for roses and the other for carnations.

FOR SALE.

The entire collection of plants in a private greenhouse, including many valuable specimens and a number of large plants.

Apply to undersigned, or to the gardener at 601 N. Main street.

T. D. ROBERTSON,
ROCKFORD, ILL.

We Sell Bulbs!

Special Prices on Application.

Weeber & Don

Seed Merchants and Growers.

114 Chambers St., NEW YORK.

G. J. MOFFATT,

Manufacturer of

PAPER BAGS AND ENVELOPES

Special attention given to

Seed Bags and Catalogue Envelopes.

NEW HAVEN, CONN.

FREESIA REFRACTA ALBA.

Very strong Bulbs.

$7.00 per thousand; $1.00 per hundred.

CASH WITH ORDER.

W. C. KABER & CO.,
LA PORTE, IND.

LILIUM HARRISII.

Original and largest growers of this important bulb.

OUR SPECIALITY:

True Stock. Lowest Prices. Best Quality.

F. R. PIERSON CO.,
TARRYTOWN-ON-HUDSON, NEW YORK.

BULBS. BULBS.

Fall '93 Importations. We guarantee sound delivery.

WE SHIP FOR

JULY—Freesias and Calleborus, Brodiaeas, Fritillarias, etc.

AUGUST and SEPTEMBER—Callas, Longiflorums, Australian Tree Fern stems and Australian Palm seeds, Chinese Narcissus.

OCTOBER to APRIL—Auratums, Albums, Rubrums, and all other Japanese Bulbs. Deciduous and other stock. Cycads, Zamias, etc.

Send for our New Trade List giving full descriptions, etc. We can give you prices NET to points of destination that you will know to a penny what goods will cost you delivered. Remember we GUARANTEE SAFE DELIVERY—accidents to carriers excepted.

Callas, Callas, Callas, and Freesias.

We control a large stock of these, and will if ORDERED EARLY, give extra favorable rates

FROM JAPAN DIRECT.

We can ship you Bulbs from Japan direct, either via San Francisco, or via Suez; but we cannot assume any risk on these shipments. Our prices and terms we can make you, however, are more favorable than any other firm in the trade. Full particulars and information on application. . . . .

SEND EARLY ORDERS.

Auratums threaten to be scarce again, especially larger sizes.

H. H. BERGER & CO., SAN FRANCISCO, CAL.

GT. VAN WAVEREN & KRUYFF,

GROWERS OF

Hyacinths, Tulips, Crocus, Daffodils,

LILIES, ETC., ETC.

SASSENHEIM, Haarlem, HOLLAND.

ESTABLISHED 1866.

HULSEBOSCH BROS.,

BULB AND PLANT GROWERS,

OVERVEEN, near Haarlem, HOLLAND.

	Per 100	Per 1000
Lilium Harrisii, 4 to 5-inch in circ	$2.50	$20.00
" " 5 to 7-inch in circ	3.00	24.00
" " 7 to 9-inch in circ	5.25	47.00
" " 9 to 12-inch in circ	11.00	100.00
Lilium Longiflorum 10 per cent dearer than Lilium Harrisii		
Roman Hyacinths, extra selected	2.50	22.00
" " top roots	3.00	25.00
Narcs. Totus Albus, extra selected	1.00	7.50
" " Grandiflorus, ext. s'lected	1.30	11.00

Fall Wholesale Catalogue now ready. Address

A. HULSEBOSCH,

P. O. Box 3118. Warehouse 58 West Street,

NEW YORK CITY.

ONION SEED

OUR SPECIALTY.

Grown from selected Onions and the purest stock in the United States.

1893 CROP 1893

Yellow Globe Danvers, Yellow Flat Danvers, Extra Early Red, Wethersfield.

Write for Prices.

COX SEED AND PLANT CO.

SAN FRANCISCO, CAL.

Columbia Farm,

ST GEORGES, BERMUDA

The undersigned solicits offers for about 100 lbs. Freesia seed R. alba for the whole, or in lots of 10 lbs. Also a few early white Roman Hyacinths, Gladiolus, Calla, Chinese Sacred Lily, Amaryllis Johnsonii bulbs and Canna roots; choice varieties. June and July delivery.

R. H. JAMES,

Grower and Exporter of Bermuda Bulbs.

FREESIA BULBS, Refracta alba, strong flowering bulbs $1.00 per 100; $9.00 per 1000. By mail postpaid.

R. MANN & SON, Lansing, Mich.

Freesia refr. alba.

READY NOW. Samples mailed free.

	Per 100	Per 1000
SELECT BULBS	$ .75	$5.00
EXTRA SELECT BULBS	1.00	8.50

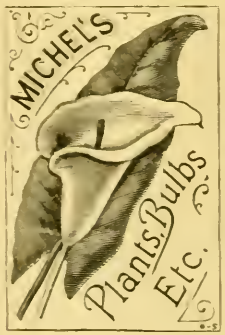
W. W. BARNARD & CO.,

6 and 8 North Clark Street, CHICAGO.

We make special import prices on

ROMANS, LILIUM HARRISII, NARCISSUS, HYACINTHS, TULIPS, VALLEY PIPS, and all other FORCING BULBS. . . . . .

Let us know your wants and get our prices.



Write for Wholesale List.

MICHEL PLANT AND BULB CO.,

ST. LOUIS, MO.

Lily of the Valley Bulbs.

THE STAR BRAND

SPECIALLY RECOMMENDED FOR LATE FORCING.

We are now booking import orders for shipment from Hamburg in October or November.

REISS & BRADY,

280 Washington Street, New York.

SEGERS BROTHERS

Offer HYACINTHS, TULIPS, DAFFODILS,

And all other bulbs for forcing and outdoor, in very fine quality, at reasonable rates.

If any of our friends have not received a copy of our Catalogue of 1893, should write for one at once.

Please DO NOT DELAY ordering.

SEGERS BROTHERS,

WHOLESALE BULB GROWERS,

LISSE, near Haarlem, **HOLLAND.**

ZIRNGIEBEL'S Giant Market and Giant Fancy PANSIES,

are without question the most popular strains in cultivation up to date.

New Seed ready now, in trade packages of either strain, at one dollar each.

Denys Zirngiebel,
NEEDHAM, MASS.

PANSY SEED. PANSY

The Jennings strain of large flowering and Fancy Pansies, new crop now ready. 8 pounds of seed and over 500,000 plants were sold last season. This strain is popular, and why? Because Florists can depend on getting only First Class Stock. I shall sell no other. My aim is to supply the best. Finest Mixed, all colors, trade pkt. 500 seeds 25c.; 1000 seeds 50c.; 2000 seeds $1.00; per ounce $8.00. Pure White (the finest) trade pkt 50c. and $1.00; Golden Yellow, dark eye, trade pkt. 50c. and $1.00. Send for price list for other varieties. Pansy Plants, ready September 1 to December 25, any size wanted, cold frame size 65c. per 100 by mail; $5.00 per 1000 by express; 5,000 $20. Large flowering plants $1.00 per 100; $8.00 per 1000. Cash with order.

ADDRESS **E. B. JENNINGS,**
WHOLESALE PANSY GROWER,
Lock box 234 SOUTHPORT, CONN.

EXTRA PANSY SEED.

Mammoth Sunbeam Strain.

A grand collection of giant flowering varieties, very large, of perfect form, and choice colors; carefully selected; receive high praise from my customers; better than ever; no finer strain offered anywhere. Every florist should sow of it. Trade pkt., 500 seeds, 25 cts.; 3 pkts. 60 cts.; 6 pkts. $1.00.

JOHN F. RUPP, Shiremanstown, Pa.

100,000 SMILAX PLANTS.

From 2-inch pots, for June delivery, at $2 per 100; $15 per 1000. Terms strictly cash. Orders booked now. Address

FRED SCHNEIDER, Wholesale Florist,
WYOMING CO., ATTICA, N. Y.

Mention the American Florist when writing to advertisers on this page.

PANSIES.

THE BEST ARE THE CHEAPEST.

SIZE is a strong point in Pansies; when you combine size, color, substance and form they are pretty near right. By careful hybridization and selection I have accomplished this, and the Pansies I send out this Fall will be an agreeable surprise, even to former customers. If you buy Pansies I would be pleased to correspond with you; they will be offered for sale from Aug. 20th to Dec. 1st, at 75c. per 100 or $5 per 1000. Terms cash with order or C. O. D. No seed for sale.

L. B. 496. **ALBERT M. HERR, LANCASTER, PA.**

THE TOTTENHAM NURSERIES Lt'd, OEDEMSVAART, HOLLAND.

(OLD FIRM A. M. C. JONGKIND CONINCK)

Hardy home-grown bulbs and flower roots, herbaceous plants, ferns, hydrangeas, aquatics, young fruit trees rhododendrons, conifers, etc. for fall importation. Catalogue free on application to their sole agents.

C. C. ABEL & CO., P. O. Box 920, New York.

J. J. MOSER,

Versailles Nurseries,
VERSAILLES, - FRANCE.
Cable Address: MOSER, VERSAILLES, FRANCE.

SPECIALTIES.

Hardy Rhododendrons, Azaleas, Kalmias, Palms, Fruit Trees, Rose Trees, Japanese Maples, Ornamental Trees, Orchids, Perennials.
Grand Choice of Extra Large Conifers.
Catalogues sent on Application.

A. MOSER, Agt.,
2223 Cottage Grove Ave., CHICAGO, ILL.

P. SEBIRE & SONS,

Nurserymen, USSY, Calvados, FRANCE.

A general assortment of Fruit Tree Stocks, such as Apple, Pear, Myrobolan Plum, Mahaleb and Mazzard Cherry, Angers Quince, Small Evergreens, Forest Trees, Ornamental Shrubs, Roses, etc. The largest stock in the country. Prices very low. Packing secured. Catalogue free. Send for quotations before placing your order elsewhere. Agents for U. S. America and Canada.

C. C. ABEL & CO., P. O. Box 920, New York.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

Association "Flora"

BOSKOOP, HOLLAND

NURSERIES.

Roses, Clematis, Shrubs, Azaleas, Palms, Herbaceous Plants, Bulbs, Etc.

Catalogue on Application.

P. OUWERKERK,
206 Cambridge Ave., JERSEY CITY, N. J.

Helianthus Maximillianus

This noble perennial herbaceous Sunflower grows to the height of ten 10 feet in good rich soil, and blooms in the Fall, throwing grand spikes of its beautiful single flowers.

Strong plants, $1 per doz.; $6 per 100.

EDWIN LONSDALE,
WYNDMOOR, near Chestnut Hill, PHILADELPHIA.

TRY DREER'S GARDEN SEEDS.

Plants, Bulbs & Requisites. They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.

HENRY A. DREER,
Philadelphia, Pa.

The President of the Pennsylvania Horticultural Society Entertains Columbus.

Members of the S. A. F. who enjoyed a sample of Mr. Childs' hospitality in 1886 will be pleased to read the following clipping, showing that the genial editor is still at his old tricks:

Driving out Locust street to Twenty-first, and thence to the Green street entrance of the Park, the party passed along the most attractive drives through Bala and along the Lancaster pike to Bryn Mawr, arriving at Wootton shortly after 4 o'clock. The grounds of the beautiful country seat were more than ordinarily pretty and picturesque. The lodge gate was profusely decorated with the Spanish and American colors intertwined. Spanish pennons floated in the brisk breeze from several marquees spread upon the green lawn. Mrs. Childs, standing upon the broad steps of the house cordially welcomed her guests, and conducted them into the main drawing room. The other guests, meanwhile, had begun to arrive, by train and in carriages, and to the number of nearly 600 passed through the drawing room and were presented to the Duke and Duchess and Mr. and Mrs. Childs.

Luncheon was served on the lawn, while Hassler's Orchestra discoursed sweet music from a neighboring marquee. The garden party was fittingly closed by the planting of several trees by the ducal party. To the small forest of trees which during the past decade have been planted at Wootton by General Grant, Grand Duke Alexis and other distinguished persons, were added seven young elms and maples, one planted by each of the distinguished visitors.

At the conclusion of the reception, the majority of the guests departed, and the ducal party sat down to dinner with Mr. Childs and one or two other close friends of the host, including Archbishop Ryan.

"Wootton's" genial superintendent, John M. Hughes, was the master of ceremonies (as he always is) at the tree planting. John has hob-nobbed in this way with a great many of the world's celebrities. It's enough to make any ordinary mortal take on airs, but John keeps a level head through it all.

G. C. W.

Swainsona galegifolia alba.

Nice young plants in 2¼in. pots, $3.00 per dozen. STOCK LIMITED.

EDWIN LONSDALE,
WYNDMOOR, near Chestnut Hill, PHILADELPHIA.
Money Order Office, Station "G," Phila.

HEADQUARTERS for WATER LILIES

Now is the time to plant all tender and tropical varieties without risk and loss. Secure your stock early. Prices moderate. Send for Catalogue.

WM. TRICKER, DONGAN HILLS, NEW YORK.

E. G. HILL & CO.,
Wholesale Florists
RICHMOND, INDIANA.

CATALOGUE PRINTING.
ELECTROTYPING.

Done with expert ability for Florists Nurserymen, Seedsmen. Write to

J. Horace McFarland Co.,
HARRISBURG, PA.

Cyclamens.

	Doz.	Hundred
Select strains, In 3½-in pots	$1.00	$8.00
H. P. Roses, Select named kinds....	1.50	10.00
Smilax, stocky, well-hardened Seedlings, ... per thousand,	6.00	.75

F. A. BALLER,
BLOOMINGTON, ILL.

IMPORTED ORCHIDS.

Cattleya Mossiæ just arrived in splendid condition. East Indian Orchids have arrived. Among them will be a grand lot of Vanda Cœrulea, Cypripedium Insigne, collected in the original district from which all the choicest varieties have come, Cymbidium Eburneum, C. Mastersii, C. Devonianum, C. Gigantleum. Also Dendrobium Nobile, D. Farmersii, D. Chrysotoxum, D. Thyrsiflorum, D. Aureum, D. Densiflorum, D. Devonianum, D. Cambridgeanum and other Dendrobes, together with a small lot of Phajus Wallichii and Pleiones. Prices of the above on application.

Of Established Orchids a fine selected stock of Cattleya Trianæ, well established in 6-inch pots and will produce four to eight flowers each next winter. Many very choice varieties will be found among them. Single plants $2.50; 12 for $25.00; 100 for $175.00. Terms sixty days to buyers with satisfactory references, or 5 per cent discount for cash.

IG. FORSTERMAN, NEWTOWN, N. Y.

Carnations All Sold

We still have some Fine Plants of

The Best Yellow Canna, **NELLIE BOWDEN,** 75c each. $8.00 per dozen

JOHN McGOWAN, - - Orange, N. J.

You Must be Thinking

Now about the pot-grown Strawberry Plants you will need for your trade this summer. We will have them in leading varieties after July 1, at $18.00 per 1000. $15.00 in large orders. We can ship at once. NO WAITING.

Rogers' Nurseries, Oldest in the State Moorestown, N. J.

"CHRYS-COLA."

COLEUS.

Verschaffeltii, Golden Verschaffeltii, Hero Yeddo, Firebrand, Firecrest, J. Goode, Chicago Bedder. Plants from 2¼ and 2-inch pots.

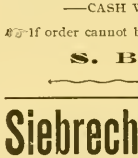
$1.50 per 100; $12.50 per 1000.

—CASH WITH ORDER.—

If order cannot be filled, will notify by wire.

S. B. FIELD,
ROSELLE, N. J.

Siebrecht & Wadley,
ROSE HILL NURSERIES,
NEW ROCHELLE, N. Y.



Palms, ORCHIDS Roses, and New Plants.

FRESH DRACAENA CANES NOW READY.

ORCHIDS.
The Finest Stock in the World.
SANDER'S, ST. ALBANS, ENGLAND.
Thirty minutes from London.
Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City.

ROEMER'S SUPERB PRIZE PANSIES
The finest strain of Pansies in the World.
Introducer and Grower of all the leading Novelties.
Catalogue free on application.
FRED ROEMER, SEED GROWER,
QUEDLINBURG, GERMANY.

Please mention the American Florist every time you write any of the advertisers on this page.

FIELD GROWN CARNATIONS.
50,000 Ready in the Fall.
W. R. SHELMIRE,
CHESTER CO., AVONDALE, PA.
Correspondence Solicited.

CARNATIONS.
A SPECIALTY.
Full stock of all the new and leading varieties. Rooted Cuttings, Young Plants, and Field Grown Plants in season. Get our prices before purchasing.
GEO. HANCOCK,
GRAND HAVEN, MICH

Phœnix rupicola.

This useful and beautiful Date Palm in EXTRA FINE PLANTS, growing in from 7 to 10-inch pots, from $3.50 to $7.50 each, according to size.

EDWIN LONSDALE, Wyndmoor,
STATION "G," PHILADELPHIA.
(Chestnut Hill P. O.)

CARNATIONS
Rooted Cuttings all sold or planted out.
FIELD GROWN PLANTS IN SEASON.
Correspondence Solicited.
C. J. PENNOCK, THE PINES,
Chester Co., KENNETT SQUARE, PA.

CARNATIONS
ROOTED CUTTINGS
of all the leading varieties. Will be ready January 1, 1893.
R. T. LOMBARD, Wayland, Mass.

ROOTED CUTTINGS of CARNATIONS
By the Wholesale.
Ready now. This is the best time for intending buyers to supply themselves. offer them at moderate prices. Send for Price List. Address
JOSEPH RENARD, Unionville, Chester Co., Pa.

STRONG SMILAX
$15.00 PER 1000.
THE FLORAL EXCHANGE,
611 Chestnut St., PHILADELPHIA, PA.

Cape Flowers, new crop in best white quality at $1.00 the lb.; 10 lb. lots, $9 net.

Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 28-in. upwards, at 40c., 45c., 50c., 60c., 75c. and $1.00 each, according to length.

Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.

Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.

Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc. For prices consult our

Trade Catalogue, mailed free.

August Rölker & Sons,
136 & 138 W. 24th St., P. O. Station E. **New York.**

REMEMBER

That Neatness and Prosperity go hand in hand.

The good business man is just as careful about the appearance of his place of business during the dull summer months as in the busy times in winter. If a store is worth keeping at all it is worth keeping well. Fresh flowers are of little use in the hot months for store decoration. Fill up your window and show cases with an attractive display of goods that will keep well until sold. There are handsome Baskets, Metal Designs, Wheat Sheaves, Immortelle goods, etc. in great variety, all of which we can supply you at lowest prices for first-class stock. Keep the flies and dust off them and your store will prove an attraction to your customers and a profit to yourself. Send for list of summer supplies.

H. BAYERSDORFER & CO.,
Wholesale Only,
56 N. 4th Street, PHILADELPHIA, PA.

MARSCHUETZ & CO.,
Florists' Supplies,
23 & 25 N. 4th St., PHILADELPHIA, PA.
Send for Catalogue.

ERNST KAUFMANN & CO.,
Florists' Supplies,
113 NORTH 4TH STREET,
PHILADELPHIA, PA.

PANSIES.

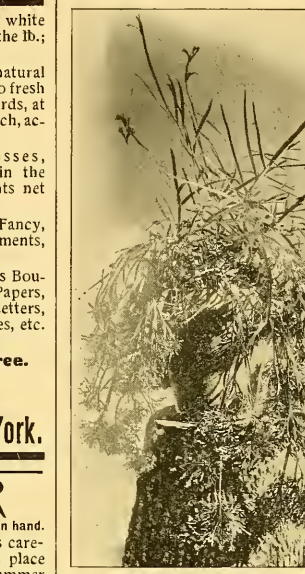
During the season we shall have plants of best German strain of Pansies, at lowest prices.

BRAUER & RICHTER,
McCONNELSVILLE, OHIO.

CHICAGO.

My Catalogue for the American trade being now ready, copies can be had at my exhibit at the World's Fair, or from my address.

OSCAR TIEFENTHAL,
Wandsbek, Hamburg, Germany.



THE BEAUTIFUL

Pteris Serrulata Eblenii,

RAISED BY ME,
NOW OFFERED FOR SALE.

As this plant is quite different from anything in existence, a decided novelty, strikingly handsome, every florist ought to get it. . . .

THE PRICE IS FROM 50c. to $1.00 EACH; $5 00 to $10.00 PER DOZEN.

TERMS CASH.

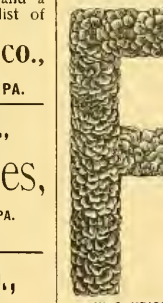
Address **JOHN EBLEN,**
Hurst Street, NEW ORLEANS, LA.

HOW TO GROW CUT FLOWERS.

A PRACTICAL TREATISE ON

THE CULTIVATION OF THE ROSE,

And Other Flowering Plants for **Cut Flowers,** sent to any address upon receipt of $2.00. M. A. HUNT, Terre Haute, Ind.



W. C. KRICK'S
PATENT
Florists' Letters, Etc.

Highest Award wherever exhibited.

These Letters are made of the best immortelles, wired on wood or metal frames having holes drilled in them to insert toothpicks, by which to fasten them in the design. All infringements prosecuted.

2-inch Letters, $3 00 per 100. Postage, 15c. per 100.

Before purchasing send for free sample and Catalogue and compare with any other letter in the market.

W. C. KRICK, 1287 Broadway, BROOKLYN, N. Y.

Agents:—J. C. VAUGHAN, Chicago, Ill.; H. BAYERSDORFER & Co., Phila., Pa.; N. STEFFENS, N. Y.; AUG. ROLKER & SONS, N. Y.; ED. S. SCHMID, Washington, D. C.; JAMES VICK'S SONS, Rochester N. Y.; T. W. WOOD & SONS, Richmond, Va.; J. A. SIMMERS, Toronto, Ont.

TRADE MARKS. COPYRIGHTS.

SOLICITOR OF U. S. AND FOREIGN PATENTS,
Atlantic Building, Washington, D. C.
(Send sketch or model for free examination as to patentability.)

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

BOSTON FLORIST LETTER CO.,
13 Green Street, BOSTON, MASS.
Address all correspondence to 1 Music Hall Place.

Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1¼-inch and 2-inch, $2.00 per 100. Patent fastener with each letter.

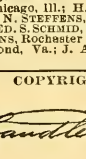
With orders for 500 letters we give away a nicely stained and varnished box. See cut in next week's American Florist.

Our letter is handled by all the wholesalers in Boston.

AGENTS: Marschuetz & Co., 25 N. 4th St., Philadelphia, Pa.; A. Rolker & Sons, New York; F. E. McAllister, 22 Dey St., N. Y.; Ernst Kaufmann & Co., 113 North Fourth Street, Philadelphia; H. Bayersdorfer & Co., Philadelphia, Pa.; A. D. Perry & Co., 33 Warren Street, Syracuse, N. Y.; A. C. Kendal, 115 Ontario St., Cleveland, O.; E. H. Hunt, 79 Lake St., Chicago; Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.; H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O.; T. W. Wood & Sons, 6th and Marshall Sts., Richmond, Va.; Jas Vick's Sons, Rochester, N. Y.; Dan'l B. Long, Buffalo, N. Y.; C. A. Kuehn, St. Louis. F. C. Huntington, Indianapolis, Ind.

J. A. Simmers, Toronto, Ont., Agt. for Canada.

Mention American Florist.



WHITE DOVES
FOR FLORISTS.

Largest and finest stock in the United States. Write for prices to

S. J. RUSSELL,
350 Montgomery St., Jersey City, N. J.

FOR SALE BY Messrs. F. E. McAllister, Ed Jansen, A. Herrmann, N. Steffens and Reed & Keller, New York; W. C. Krick, Brooklyn, N. Y.; H. Bayersdorfer & Co., Ernst Kaufmann and Marschuetz & Co., Philadelphia, Pa.; C. Ribsam & Sons, Trenton, N. J.; J. M. McCullough's Sons and B. P. Critchell & Co., Cincinnati, O.; J. C. Vaughan, Chicago, Ill.; Wisconsin Flower Exchange and Currie Bros., Milwaukee, Wis.; C. A. Kuehn, S. Mount & Co., C. Young & Sons Co. and Jordan Floral Co., St. Louis, Mo.; C. Strauss & Co. and Ed. S. Schmid, Washington, D. C.; G. W. Currey & Co. and Eckhardt & Co., Nashville, Tenn.; T. W. Wood & Sons, Richmond, Va.; U. J. Virgin, New Orleans, La.; D. B. Long, Buffalo, N. Y.; J. A. Simmers, Toronto, Ont.

Mention American Florist.

Baltimore.

A week of cool, cloudy weather has not helped business as much as might have been expected. In fact cut flowers are only a little ahead of plants and plants are very little, if any, ahead of nothing at all.

Decorations are becoming fewer and fewer, and in a healthy place like Baltimore funerals are not frequent enough to enrich the numerous florists waiting to profit by them.

Prices are very, very low. Good buds can be had at 3 cents. Sweet peas are plentiful at 25 cents per 100, and most other flowers sell for what can be gotten for them.

It is a question now with the men in the trade whether to go to St. Louis or not. On the one hand, it costs both in time and money, on the other, it pays, both in rest and experience. It would benefit all hands, every way, to get up a big excursion of the whole club, and take in the convention and the World's Fair too. Let's all go! MACK.

Crude Oil for Fuel.

Can crude oil be used as fuel in a hot water heater? If so, would it be cheaper at 70 cents per barrel than hard coal at $7.25, or soft coal at $4 per ton. Can the offensive smell arising from the oil be averted? What kind and how many burners would be required to heat 900 feet of 4-inch pipe? K.

Patents Recently Granted.

Plant supporter, Gustav Kruger, Stettin, Germany; Weed exterminator, John S. Dunlap, Peoria, Ill.; Method of preserving fruits or vegetables, Milledge B. Wever, San Antonio, Fla.; Boutonniere, Henry W. Fishel, New York, N. Y.

CUTS!

Wood Engraving,
Zinc Etching,
Half-Tone,
Wax Engraving, Photo-Engraving,
Designing.

MANZ & CO., ENGRAVERS.
183 Monroe Street, CHICAGO.

EVANS' IMPROVED
CHALLENGE VENTILATING APPARATUS
Write for Illustrated Catalogue.
QUAKER CITY MACHINE WORKS, Richmond, Ind.
Mention American Florist.

FLORISTS' HOSE,
Made by E. W. Holt, member of the Society of American Florists.
Goodyear Rubber Store,
2 W. 14TH ST. NEW YORK.

FLORAL DESIGNS
The Cut Flower Worker's Friend. Fine book of 160 pages. Send $3.50 for it, to
J. HORACE McFARLAND, Harrisburg, Pa.

STOTT'S SYSTEM OF SPRAYING SAVES PLANTS-FLOWERS-FRUITS,
KILLMRIGHT KILLS, INSECTS AND MILDEW

STOTT'S DISTRIRUTER
CHARGED WITH KILLMRIGHT, CONNECTED WITH FAUCET READY FOR USE WORKS EQUALLY WELL WITH A GARDEN ENGINE.
TOTT'S PRAYER
SEND FOR CIRCULAR AND TESTIMONIALS.

STOTT'S SYRINGE

CELL "A" CONTAINS THE KILLMRIGHT
STOTT GARDEN IMPLEMENT COMPANY
136 LIBERTY ST. NEW YORK.

H. M. HOOKER COMPANY,
57 and 59 W. Randolph Street, CHICAGO,
NATURAL GAS MADE GLASS
FOR GREENHOUSES.
Write for latest prices.

"Standard" Flower Pots.
As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address
The Whilldin Pottery Company,
BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.
Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.
A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.
We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.
SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

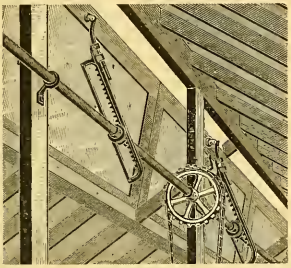
Lawn Vases.
THE LARGEST IN THE MARKET FOR THE MONEY.
17x20-inch ....price $1.00.
17x34-inch, with base, price $1.75.
20x22-inch.....price $1.50.
20x22-inch, with base, price $2.25.
Send for our price list of Standard Flower Pots, Plain and Fancy Vases, etc., etc. Terms cash f. o. b.
HILFINGER BROS. POTTERY, Ft. Edward, N. Y.

When writing to any of the advertisers on this page please mention the American Florist.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser in these columns.

SEE HERE BROTHER FLORIST!

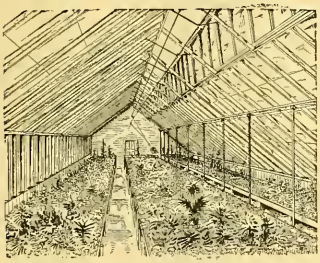
Arn't you tired going through your houses two or three times a day year after year and lifting your ventilating sash one at a time and propping them up with sticks or pots, with a chance of having sash blown off and broken glass to pay for? If you are



We have got just the thing you need, the Newest and Best thing out. "The New Departure" for about half the cost of the old style. Send for Descriptive Catalogue to

J. D. CARMODY, Evansville, Ind.

THE CHAMPION



Automatic Ventilator.

The cheapest, easiest to operate, and by far the best machine in the market. Don't buy a Ventilator until you have seen my illustrated descriptive circular, which will be sent you free, giving prices, etc. Also Champion Soil Pulverizer and Sifter.

Address, **E. E. WOLF,**
Box 114. SPRINGFIELD, O.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

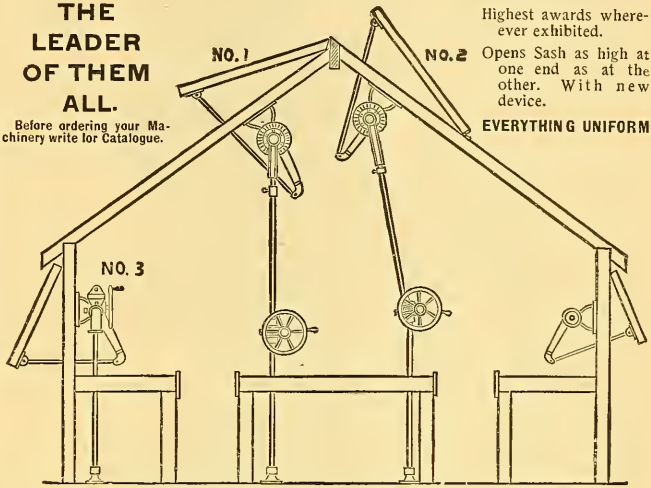
Clear Cypress, from bottom gutter up is my specialty.

Lyman Felheim, ERIE, PA.

STANDARD VENTILATING MACHINERY,

THE LEADER OF THEM ALL.

Before ordering your Machinery write for Catalogue.



Highest awards wherever exhibited.

Opens Sash as high at one end as at the other. With new device.

EVERYTHING UNIFORM

E. HIPPARD, YOUNGSTOWN, OHIO.

SMITH & WEBSTER,

MAKERS OF

GREENHOUSE PIPE

FOR HOT WATER AND STEAM,

193 Lake Street, - CHICAGO. ILL.

FRENCH GLASS For CONSERVATORIES, ROSE HOUSES, Etc. Etc.

VANHORNE, GRIFFEN & CO.,

Importers of PLATE and WINDOW GLASS. Manufacturers of BENT GLASS and FRENCH MIRRORS.

131-133-135-137 FRANKLIN STREET, NEW YORK.

Note—Imported Glass is used in the best grade of Greenhouse building.

J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS • Greenhouse Material,

LOUISVILLE, KY.

Mention American Florist.

STANDARD HOSE MENDER.

The only Mender using ordinary galvanized wire No. 14, instead of expensive bands. Any person can handle it with perfect ease. Thousands in use and all testify to its Wonderful Merits.

Sample Box, by Mail, 50 cts.

E. HIPPARD, Youngstown, Ohio.

THE WABASH

. . . WILL BE THE . . .

"FLORISTS LINE" TO THE ST. LOUIS CONVENTION, as well as returning.

Write F. A. PALMER, Gen'l Pass. Agt., 201 Clark Street, CHICAGO.

It is expected a party will be made up leaving Chicago about August 7.

THE PERFECT DRAINAGE

BENCH TILE

For circulars, etc., address

W. P. Wight, Upland Green Houses,

Send your business card. MADISON, N. J.

Mention American Florist

GLASS. ROCK BOTTOM PRICES. Send for Estimate. Satisfaction Guaranteed.

REED GLASS CO.,
65 Warren St., and 46, 48 & 50 College Place, New York City.

Cincinnati.

As July 4th approaches business seems to be coming nearer to a standstill, but our florists are all looking forward to better times in the future. The nerviest one we have is Ben George, who was married on the 21st inst. Recently he formed a partnership with Geo. Magrie, under the firm name of Magrie & George. Their greenhouses are situated at College Hill, Ohio. They expect to grow only for the cut flower trade. Lily of the valley, equal to winter grown, is being brought to the commission houses by some of our growers. Brides, Mermets and Perles are still good for the time of year, as well as carnations.

Last week the writer visited the National Soldiers' Home at Dayton, O. Mr. Beck deserves much credit for the splendid landscape gardening. There are several ponds of aquatics that add much to the beauty of the place. This gardening, which includes a great deal of rustic work, is all done by the inmates of the Home, under Mr. Beck's personal supervision. They have quite a large range of glass and their stock looks well. I am sorry I can not speak of the landscape gardening in our parks of Cincinnati, but that seems to be far in the future, very much behind the times in comparison with our sister cities.

A communication from W. J. Stewart, secretary of the S. A. F., has been received asking that our society, or those going to St. Louis, join the New York special. This we shall be pleased to do, as we enjoy good company.

E. G. GILLETT.

Base Ball.

The Pitcher & Manda Ball Club, of Short Hills, N. J., crossed bats with the John Lewis Childs Club at Floral Park, N. Y., on Saturday, June 24. The J. L. Childs Club were victorious by a score of 19 to 4. After the game the visitors were royally entertained by the home club.

G. B. R.

THE "LOCKLAND" Sash Bars

ARE ALWAYS SATISFACTORY.

This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.

GUTTER MATERIAL, RIDGES, SASH, ETC.

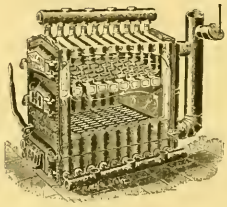
The finest CLEAR CYPRESS used.

Write for circulars and estimates. . . .

LOCKLAND LUMBER CO.

Lockland, O.

Mention American Florist.



Royal Heaters.

—:o:—

HOT-WATER, STEAM.

Always a Free CIRCULATION of Water.

LARGE HEATING SURFACE.

HART & GROUSE, UTICA, N. Y.

SCOLLAY'S IMPROVED PUTTY BULB,

For Glazing Sash, Etc.

—ALSO THE—

Patent Plant Sprinkler

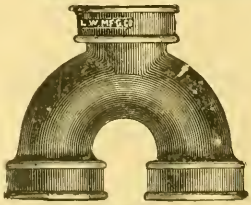
For sale by your Seedsman, or sent, postpaid, for $1.00.

JOHN A. SCOLLAY,

74 & 76 Myrtle Ave., BROOKLYN, N. Y.

Send Stamp for Catalogue.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

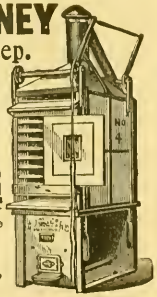
Mention American Florist.

L. WOLFF MFG. CO., 93 to 117 W. Lake Street, CHICAGO.

WRITE FOR ILLUSTRATED CIRCULAR.

MAKE MONEY While You Sleep.

STAHL'S EXCELSIOR FRUIT DRIER



Evaporates Fruit DAY and NIGHT. Catalogue free upon application. Address

WILLIAM STAHL EVAPORATOR COMP'Y, QUINCY, ILL.

IMPROVED GLAZING.

Zinc Joints for butting glass without laps. No leakage. No sliding of glass. Practically air tight. Keeps out cold winds, thereby saving fuel. No laps, saves enough glass to pay for the zincs. No breakage of glass on account of frost or ice. Some of the largest growers in the country are using "Gasser's Patent Zinc Joints" with entire satisfaction. Write for sample and price list.

J. M. GASSER, FLORIST,

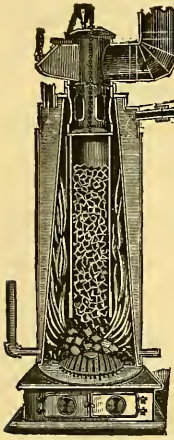
101 Euclid Ave., CLEVELAND, O.

OUR Sash Lifter AND Hinges

will do the work and cost you less than any other. Send your name and address and we will mail you description and price.

BAY STATE HARDWARE CO.

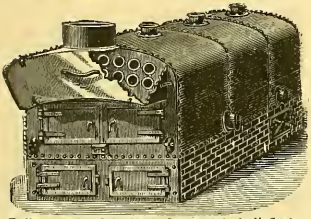
272 Freeport Street, BOSTON, MA



THE WILKS HEATER,
FOR HEATING
GREENHOUSES, STORES, DWELLINGS, ETC.
Manufactured by THE S. WILKS MF'G CO. 123 S. Clinton St. CHICAGO, ILL.
SEND FOR CATALOGUE.

Mention American Florist.

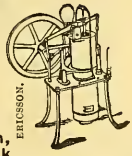
KROESCHELL BROS.
IMPROVED
Greenhouse ×× Boiler,
41 to 55 Erie St., CHICAGO.



Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around front, sides and back). Write for information.

Mention American Florist.

WATER
For Your
GREEN HOUSE,
ROSE HOUSE,
NURSERY,
Conservatory, Lawn, House, Garden, Stock or any other purpose.
Send for Illustrated Catalogue
OF THE
DE LAMATER-RIDER AND
DE LAMATER-ERICSSON
PUMPING ENGINE.



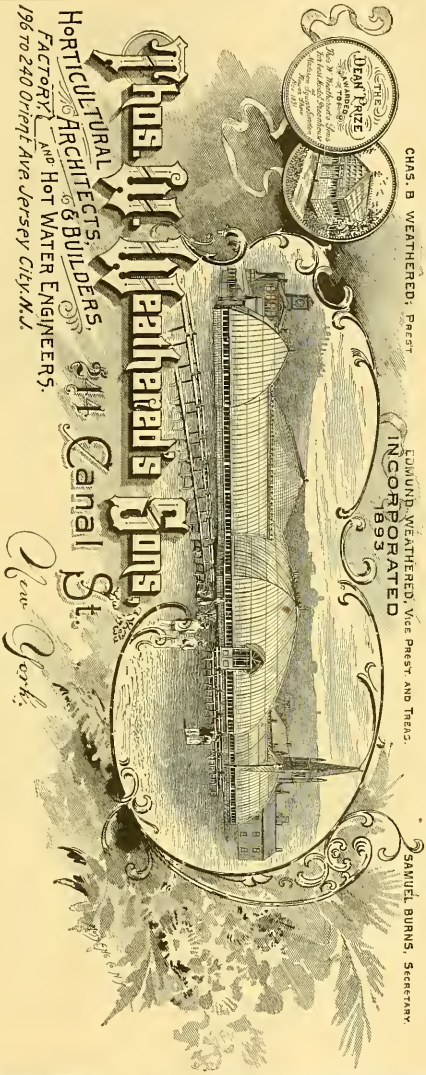
ERICSSON.

HOT-AIR PUMPING ENGINE.

Their operation is so simple and safe that a child can run them. They will pump water from shallow streams or any kind of well. They can be arranged for any kind of fuel. Capacity 1,500 to 30,000 gallons of water a day, according to size.

The De Lamater Iron Works,
87 South Fifth Avenue,
NEW YORK, N. Y.

RIDER.



Pat. 1882, '85, '86, '88, '90, '91.

FOR WATER, AIR, STEAM, ACIDS, OILS, LIQUORS, GAS, SUCTION,
And for any and every purpose for which a hose can be applied.
Sizes, ⅛-inch to 42 inches diameter.
The making, vending or use of any Serviceable Armored Wire Bound Hose not of our manufacture is an infringement on one or more of our Patents. The rights secured to us render each individual dealer or user responsible for such unlawful use with all the consequences thereof. For prices and discounts address WATERBURY RUBBER CO., Sole Mf'rs and Owners of all the *Sphincter Grip Armored Hose Patents*, 49 Warren Street, New York.
J. C. VAUGHAN, Agent, CHICAGO.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.
JOHN G. ESLER, Sec'y F. H. A., Saddle River, N. J.

VICTOR SPRAY PUMP.
The most wonderful pump ever invented. Requires no foot-rest or support. Send for prices.
HENION & HUBBELL, 55 N. Clinton St., Chicago, Ill.

PAINT
OR PUTTY.

For Greenhouses, Conservatories Or any other Structure. . . .

No Paint can be made too durable for the greenhouse, none too handsome for the homestead.

We make Paints BECAUSE WE KNOW HOW, and have facilities to do it. We ship to all Railroad Stations and Boat Landings without regard to distance, and will make prices laid down at your depot at figures which will pay you to patronize a cash market.

HAMMOND'S PAINT AND SLUG SHOT WORKS, Fishkill-on-Hudson, N. Y

Index to Advertisers.

Abel C C & Co.....1245
Adv. Rates, etc 1242
American Boiler Co...1252
Anchorage HoseCo..1240
Baller F A. 1246
Barnard W W & Co...1244
Bay State Hdw Co....1250
Bayersdorfer H & Co .1247
Berger H H & Co.....1244
Bock Theo. 1240
Bonsall Jos E & Son...1242
Boston Letter Co 1247
Brauer & Richter.....1247
Burns & Raynor.....1243
Burrow J G 1240
Burton John.....1240
Carman R W.... ... 1242
Carmody J D.....1246
Chandlee Geo F 1247
Chipman Bros.....1240
Corbrey T J 1243
Cox Seed & Plant Co..1244
Currey G W & Co 1242
Davidson A E.....1240
De Lamater Iron Wks1251
Dillon J L.....1241
Dow Wire Works.....1252
Dreer H A..... . 124
Dunkley Joseph.....1240
Eblen John 1247
Elliott W H.....1242
Ellison Wm.... 1243
Felheim Lyman.....1249
Field S B.....1246
Floral Exchange.....1246
Forstermann I.....1246
Gasser J M 1250
Goodyear Rubber Store 1248
Grossman C M.....1240
Gurney Heater Co 1245
Hall Ass'n.....1251
Hammond Benj.....1251
Hancock Geo 1246
Hart James.....1241
Hart Michael A 1243
Hart & Crouse.....1250
Hartford H E.....1242
Helss J B.....1241
Henion & Hubbell....1251
Herr Albert M.....1245
Hews A H & Co.....1248
Hillinger Bros.....1248
Hill E G & Co.....1246
Hippard E.....1249
Hitchings & Co.....1252
Hooker H M Co.....1248
Horan Edw C.....1243
Hulsebosch Bros 1244
Hunt F H.....1243
Hunt M A.....1241 1247
Hunter & Purdy.....1243
Ives Byron H.....1240
James R H 1244
Jennings E B.....1245
Kaber W C & Co.....1244
Kaufmann Ernst & Co1247
Kemble Floral Co 1241
Kennicott Bros..... 1243
Koffman E.....1242
Krick W C.....1247
Kroeschell Bros 1251
Kuehn C A..... 1243
La Roche & Stahl.....1242
Lockland Lumber Co..1250
Lombard R T.....1246
Long Dan'l B.....1243
Lonsdale Edwin.....
.....1240 1241 1245 1246
Lord & Burnham Co..1252
McCarthy N F & Co...1243
McFarland J H.....1248
McFarland J H Co....1246
McGowan John.....1246
MacBean A S..... 1240
Mann R & Son.....1244
Manz J & Co.....1248
Marschuetz & Co.....1247
Michel Plant & Bulb Co 1244
Milwaukee Bros.....1243
Moffatt G J.....1244
Moninger Jno C ... .1252
Moore Frank L.....1241
Moser J & Co.....1245
Nanz & Neuner.....1141
Niles Centre Floral Co1243
Olson M 1243
Ottwerkerk P.....1245
Parker Geo L.....1240
Peck & Sutherland....1243
Pennock C J.....1246
Pennock Sam'l S 1242
Pierson F R Co. ... .1244
Prince A G & Co ... .1243
Quaker City Mach Co.1248
Randall A L. 1243
Reed Glass Co.....1249
Reed & Keller.....1248
Reiss & Brady.....1244
Renard Joseph.....1246
Roberts D H.....1252
Robertson T D.....1244
Roehrs Theo.....1243
Roemer Fred.... 1246
Rogers Nurseries.... 1246
Rolker A & Sons 1247
Rupp John F.....1245
Russell S J.....1247
Sander & Co.....1246
Schneider Fred.....1245
Schulz Jacob. 1240
Scollay John A ... .1250
Sebire P & Sons .... .1245
Segers Bros.....1245
Shelmire W R.....1246
Sheridan W F.....1243
Sherwood Hall Nur Co1242
Siebrecht & Wadley...1246
Simons R E.....1239
Siptle, Doppler & Co...1248
Situations, wants.....1239
Smith Nathan & Son..1242
Smith W L 1239
Smith & Webster.....1249
Spooner Wm H. 1240
Stahl Wm 1250
Storrs & Harrison Co.1241
Stott Garden Imp Co..1248
Struck J N & Bro.....1249
Sunderbruch H L.....1243
Tesmer Julius & Co...1242
Tiefenthal Oscar.....1247
Tricker Wm.....1246
Tottenham Nurseries.1245
Ulbricht F J.... ... .1240
Van Horne Griffen & Co 1249
Van Waveren & Kruyff.. ... .1244
Vaughan J C.... 1241
Wabash R R.....1249
Waterbury Rubber Co1251
Watson G C 1239
Weatherd's Sons T W1251
Weeber & Don..... 1244
Welch Bros.....1243
Whilldin Pot Co 1248
Wight W P.... 1249
Wilks S Mfg Co.... .1251
Williams H W & Son..1239
Winter N D.....1239
Wisconsin Flower Ex.1242
Wolf E E 1249
Wolff L Mfg Co.....1250
Wood Bros.....1241
Zirngiebel D.....1245

WHEN SENDING us newspapers containing items you wish us to note please do not fail to distinctly mark the item so it can be easily found, as we can not spare the time to hunt through the mass of papers sent us for unmarked items.

CYPRESS GREEN HOUSE MATERIAL

CLEAR CYPRESS SASH BARS

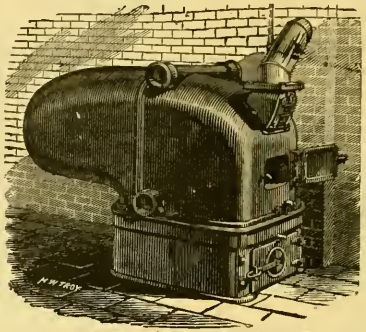
HOT BED AND VENTILATING SASH

GoodellHH 15be
Mass Agri Col '93

JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

GREENHOUSE HEATING AND VENTILATING

Horticultural Architecture and Building.



HITCHINGS & CO.

Established 1844.

233 Mercer St., New York.

FIVE PATTERNS OF BOILERS.

NINTEEN SIZES.

Perfect Sash Raising Apparatus.

Rosehouses, Greenhouses, Etc., of Iron Frame Construction, Erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frame Benches with the "Perfect Drainage Bench Tile" or Slate Top.

SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUE.

LORD & BURNHAM CO.

Horticultural Architects and Builders,

STEAM AND HOT WATER HEATING ENGINEERS.

☞ Plans and estimates furnished on application. . . . . .

Front view of a portion of our exhibit at the World's Fair.

. . . SEND FOUR CENTS POSTAGE FOR ILLUSTRATED CATALOGUE. . . .

LORD & BURNHAM CO., Irvington-on-Hudson, N. Y.

STEAM · AND · HOT · WATER · HEATERS

FOR

GREENHOUSE HEATING.

156

DIFFERENT SIZES.

American Boiler Company.

BOSTON, 195 Ft. Hill Square. NEW YORK, 94 Center St. CHICAGO, 34-36 Dearborn St. DENVER, Mining Exchange Bldg. SAN FRANCISCO, 80 Crocker Bldg.

D. H. ROBERTS,

159 and 161 S. Fifth Avenue, - NEW YORK,

NATURAL GAS MADE GLASS,

FOR ROSE HOUSES, CONSERVATORIES, ETC., ETC.

☞ Look at our WORLD'S FAIR EXHIBIT in Horticultural Building.

GURNEY Hot-Water Heaters FOR Greenhouses.

Send for a copy of our book "How best to heat our houses."

GURNEY HOT-WATER HEATER CO.

163 FRANKLIN ST., BOSTON.

New York City: Johnson & Co., 71 John St. Phila.: J. C. F. Trachsel, 246 Arch St. Chicago: Rice & Whitmore, 47 South Canal St.

WIRE DESIGNS.

NEW AND OLD PATTERNS.

SPECIALTIES MADE AND SHIPPED QUICK.

Write for prices and Catalogue of wire goods.

DOW WIRE WORKS CO., LOUISVILLE, KY.

THE AMERICAN FLORIST

A WEEKLY JOURNAL FOR THE TRADE

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, JULY 13, 1893.** **No. 267**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company. Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.
322 Dearborn Street, Chicago.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,
P. O. Drawer 164, CHICAGO.

Eastern Office: 67 Bromfield St., Boston.

The Ninth Annual Meeting

— OF THE —

SOCIETY OF AMERICAN FLORISTS

— WILL BE HELD AT —

ST. LOUIS, MO.,

AUGUST 9, 10 AND 11, 1893.

Members may remit the annual dues ($3.00) to the secretary or treasurer prior to the meeting, thus avoiding the crowd and relieving the officers on the opening day. Badge for 1893 will be sent by mail to those who remit in advance of the meeting.

Intending members can obtain any information wanted by addressing the secretary.

OFFICERS:

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer.

CONTENTS.

Program St. Louis convention 1253
The World's Fair 1253
Carnations—Seasonable hints 1254
Roses—Roses in summer 1254
A pretty church decoration (illus) 1255
Mushrooms 1255
Orchids—Cattleyas 1256
Grafting 1256
Vases (illus) 1257
Miscellaneous seasonable hints 1257
The proposed floral contest 1258
New York 1258
After the hail storm (illus) 1259
Philadelphia 1259
Reading, Pa 1260
Boston 1260
Chicago 1260
St. Louis 1261
Baltimore 1261
Pansy bed at World's Fair (illus) 1261
Where are they? 1262
When tree orders become binding 1262
Society of Am. Florists 1262
News notes 1262
Our annual convention number 1264
The seed trade 1266
Toronto 1268
Society of Indiana Florists 1270
Indianapolis 1272
New Orleans Hort. Society 1274

AS WORK progresses on our Convention Number and Columbian Souvenir, which will be issued August 3, we are more and more convinced that it will make a sensation when it appears. It will be a number that every recipient will surely wish to preserve for all time. It will contain about 80 pages.

Society of American Florists.

PRELIMINARY PROGRAM OF THE ST. LOUIS MEETING.

WEDNESDAY, AUGUST 9, 1893.

First Day, Opening Session, 11 A. M.

Address of welcome. Response.
President's address.
Reports—secretary, treasurer, standing and special committees.
Miscellaneous business.
Discussion of president's address.

Afternoon. Meeting of committee on nomenclature, enrollment of members, payment of dues, judging trade exhibition and at 3:30 o'clock a carriage ride for members and their ladies by invitation of the St. Louis Florists' Club.

Evening Session, 8 o'clock.

Essay (under the auspices of the American Carnation Society), "Carnations," C. H. Allen, Floral Park, N. Y.

Essay, "The physics of glass in its relation to light and heat" (illustrated by means of the stereopticon), Prof. F. H. King, Wisconsin State University.

The question box.

THURSDAY, AUGUST 10, 1893.

Second Day, Morning Session, 10 o'clock.

Selection of place of meeting and nomination of officers for 1894.

Essay, "The science and facts of successful rose growing," R. F. Tesson, St. Louis, Mo.

Address on behalf of the American Rose Society.

Election of vice-presidents by state delegation at close of morning session.

Afternoon. A visit to the Missouri Botanical Garden, by invitation of the trustees of the garden.

Evening Session, 8 o'clock.

Essay, "Horticultural exhibitions; how to make them successful," W. G. Bertermann, Indianapolis, Ind.

Essay, "Old and neglected plants worthy of more general use in outdoor decorations," James Gurney, Missouri Botanical Garden.

Address on behalf of the Florists' Hail Association of America, to be followed by the annual meeting of that body.

FRIDAY, AUGUST 11, 1893.

Third Day, Morning Session, 10 o'clock.

Election of officers.

Essay, "Hybridization; its benefits and results to ornamental horticulture," Dr. J. M. Macfarlane, Lansdowne, Pa.

Essay (under the auspices of the American Chrysanthemum Society), "Bench grown chrysanthemums for exhibition purposes," Elmer D. Smith, Adrian, Mich.

Address on behalf of the Florists' Protective Association, to be followed by the annual meeting of that body.

Afternoon. Meeting of the International Telegraph Delivery Association.

Evening Session, 8 o'clock.

Essay, "Labor-saving devices," P. O'Mara, New York city.

The question box.

Final committee reports.

SATURDAY, AUGUST 12, 1893.

Fourth Day.

Forenoon. The bowling contest.

Afternoon. A visit to Brownhurst, by invitation of Mr. D. S. Brown.

Evening. The first trial illumination of the city by the Autumnal Festivities Association, in honor of the Society of American Florists.

On Saturday evening it is expected that the majority of the delegates will leave St. Louis for Chicago by special train.

N. B. The membership badge of the S. A. F. will be the card of admission to all entertainments provided.

WM. J. STEWART, Secretary.

The World's Fair.

Warm weather keeps things moving and the island is full of bloom, though the first crop of roses is gone now. Soupert, though, keeps up its reputation, for it is in fine bloom, and two of the old polyanthas, Paquerette and Gloire des Polyanthas, are yielding plenty of their neat little flowers. A newly planted batch of Kaiserin Augusta Victoria looks well, and it will be interesting to watch its progress. Most of the teas are doing little at present in the way of bloom, and the rose beds begin to look bare. However, that will be provided against; showy annuals are now being bedded among the roses, which will supply bloom until frost comes. An extensive variety of these plants is used; among them are marigolds, French and African, godetia, nierembergia, Drummond's phlox, calendula, gazania, dwarf petunia, antirrhinum, thunbergia, coreopsis, helichrysum, and others. Gladioli are just coming into bloom among the roses; we may expect to see quite a show of Lemoine's hybrids later. Very showy indeed are the clematis in the center of the rose garden; viticella venosa, Duchess of Teck, fulgens hybrida and Thunbergii are covered with bloom.

Quite a show of Kæmpfer's irises is made by New York; a good sized bed is planted with them and they look well in the mass. Another good effect is obtained by stocks, which are now in abundant bloom; they form a considerable part of the German display. Martin Grasshoff, of Quedlinburg, shows a quantity of good stocks, also Pape & Bergman, of the same place. Tuberous begonias from H. Bertram, of Hamburg, are now bedded out, and they show an excellent strain, so far as can be judged at present. Another German exhibitor, Albert Brandt, shows a good dwarf white dahlia, alba imbricata; it is a pretty little flower, and assuredly early, since it is

already in bloom. It is a neat flower of the pompon order, and should be useful for florists' work. Oscar Tiefenthal's hydrangeas are showing abundant bloom, and Joseph Mock shows a large bed of tea roses; altogether this plot of ground shows bright and abundant bloom.

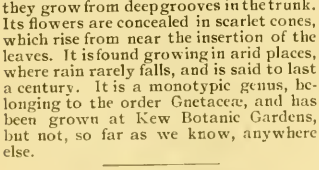
The hollyhocks will soon be very showy; a bed of good doubles near the rose garden promises finely, and there are some good ones in Ellwanger & Barry's plantation. The trees and shrubs in this display are in fine order now; the weeping mulberries look well with their ripe and half ripe fruit.

In the border planting on the island the most showy plant at present is Monarda didyma, the Oswego tea, one of our native horse mints. Planted in big clumps it shows a mass of bright red, almost scarlet blooms, the plants about two feet high. It is admirably effective and will be in bloom all summer. Agrostemma coronaria is used in similar situation, and these two plants are very noticeable. Altogether the island is very gay with bloom now.

Over in the main building some alterations in arrangement are being made; A. Blanc's cactus display has been put outside and foliage plants are taking its place. Some of the fancy-leaved caladiums have been moved over from the greenhouses, and they will make a fine showing against the green of palms and ferns. The caladiums are finely grown and will be an attractive feature. Among the orchids people are looking with interest at a stanhopea, which seems to prove a taking plant, and there are a number of good Cypripedium Lawrenceanums.

The gloxinias have not yet been moved over from the greenhouses. In addition to the New York show and the plants belonging to the department there are fine plants in the Pennsylvania state exhibit, from Henry A. Dreer. They are admirably grown.

Perhaps the most extraordinary plant in the whole horticultural exhibit is Welwitschia mirabilis, of which we see an example in the southwest annex. It is a native of western Africa and is more suggestive of an extraordinarily overgrown fungus than anything else. The trunk is about twelve inches high, a flat two-lobed mass, dark brown, hard and cracked, like an overdone loaf of bread. It has two leaves, very leathery, which split with age into numerous thongs, which curl up like withered palm leaves; they grow from deep grooves in the trunk. Its flowers are concealed in scarlet cones, which rise from near the insertion of the leaves. It is found growing in arid places, where rain rarely falls, and is said to last a century. It is a monotypic genus, belonging to the order Gnetaceæ, and has been grown at Kew Botanic Gardens, but not, so far as we know, anywhere else.



Seasonable Hints.

The time is now approaching, and even here, to clean out our houses and prepare them for the new crop. Old plants should be removed as soon as their usefulness is ended and weeds and litter not allowed to grow or accumulate on the benches. Weeds soon go to seed and give trouble in the future, and old plants serve only as a harbor for snails, sowbugs and other insects. The benches cleaned off and everything living removed it is a good plan to shut up the houses for a few days, letting them have the full benefit of the hot sun, the hotter the better. If there is no danger of the fumes passing into other houses where plants may be growing a strong fumigation of burning sulphur is a good thing. Few insects can resist this treatment, and it will kill them out if it does not get rid of them entirely. Insect's eggs, however, are probably not affected.

We seldom remove all the bench soil unless it is necessary to mend the benches or to put in new ones. Even then the soil can be shifted to an adjoining bench while the one in hand is being fixed. We do, however, remove about two inches from the top, which is taken to a pile and used the following year mixed with the potting or bench soil. A heavy coat of well rotted manure is then applied. We use spent manure from our hot beds which is usually rotted well enough for the purpose. The benches are then filled with fresh soil, a dressing of bone or bone black (about 100 pounds to a house 20x100) and all well stirred with a spade, first one way, then the other. When the soil is levelled it is ready to receive the carnations. Four inches of soil after it has settled is ample; we have alluded to this before.

We have said in the beginning of these articles that we did not believe in early planting as a general thing. We would, therefore, dampen the soil occasionally, encouraging the weeds to grow. A hoeing now and then will kill the weeds and save a good deal of work after the carnations are planted. The wetting too will keep the soil moist and in better condition for planting than if it was allowed to get very dry. W. R. SHELMIRE.

Avondale, Pa.

Roses in Summer.

BY GROVE P. RAWSON.

To continually "harp" on summer roses reminds one what Shakespere says of "damnable iteration," yet the rose as a subject is "ever charming, ever new;" like a pleasant landscape, it does not "tire the view." Its history dates much farther back than the flower that claims to be "divine." Its biographers are legion, from Monardes, 1551—Fumarellus, 1557—on down—see D. Mariano Vergara's Bibliografia de la Rosa—that I find to be a most useful compendium. As to the carnation all will concede his (?) proper place, at the same time, I repeat, there is no rivalry in Flora's domain. The lily has its own stateliness, and nothing can compare with the rose for Juno-like beauty! Even orchids cannot burlesque the rose, no matter how well other forms in nature are counterfeited.

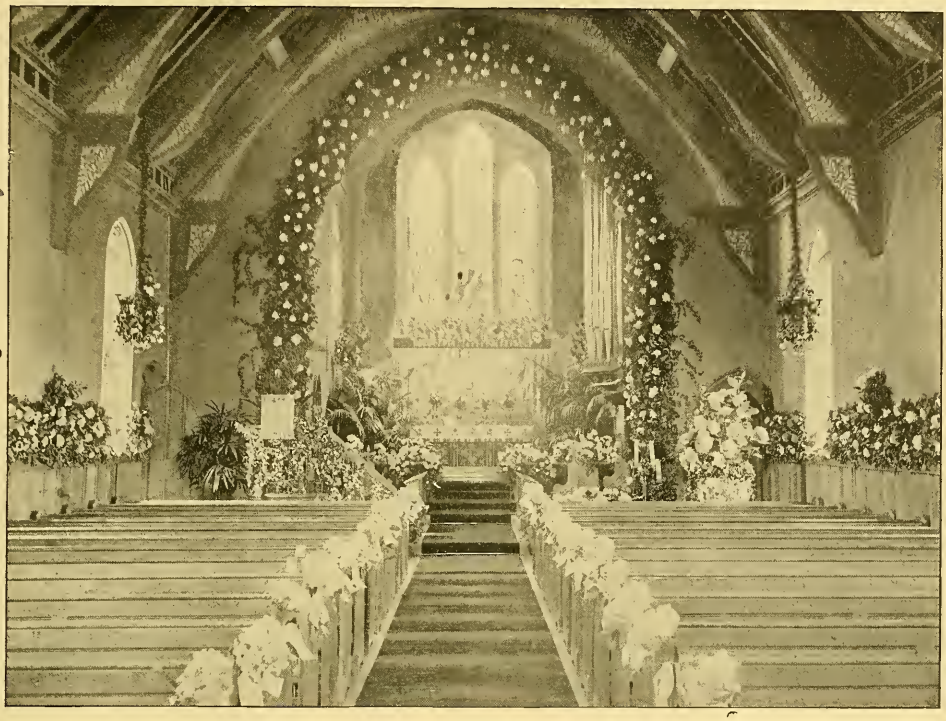
Therefore, since the rose is royalty itself we may render her due homage, and with good grace continually sing her praise. In her kingdom though, she has her enemies; insect anarchists to dispute her sway and desecrate her beauty. They would sap her life, destroy her charms and feed upon her very vitals! But how she does smile upon her *loyal* subjects. Hers is a kingdom of grace. Whether seen upon the wooded island at the World's Fair or in old fashioned grandmother's gardens, sweet briar, Scotch, Austrian, damask, hundred leaf rose, and the new aspirants to popular favor, of the florist and rosarian, all alike bow down at her shrine. It simply goes to prove that whatever else we grow for ole sure, for profit the rose has first place. It is nursed as tenderly in the tropics as we nurse her rarest exotics. It is food for fancy and it *may* be profitable to the practical minded.

July, August and September cut flower sales are small comparatively, but good roses are as much sought after and scarcer than as any other season. If there be summer resorts conveniently near at hand good sales are assured. The "summer girl" wants "summer roses" and the "summer beau" hustles his legs to get 'em, not knowing whether they are to be had or not.

Have you ever had a would-be summer customer "growl" at you because you were hopelessly unable to supply good roses—"nothing else would answer." In vain you tried to explain that pond lilies, sweet peas, bluets, etc., were quite the thing—but it was no go. After the outdoor bloom is past, usually before the first of July, except with teas or the like, those grown under glass are all that can be depended on for good blooms with good foliage—one nearly as essential as the other. The houses at this season need light shading, so as not to scald the foliage and impair their vigor. Likewise give abundance of air without admitting strong currents, hot or cold. One is as drying to the sap as the other is chilling to the soft tender growth. Also plenty of syringing to keep down red spider, a sufficiency of moisture at the roots, and occasional mulching.

Good blooms are what we want, you know, must not burn them, stunt or scald them, or give them a chance to mildew. A good depth of generous soil secures the best results in planting. Let the soil be rather shallow and they soon give out, and are much more difficult to manage successfully. The diminished vigor is plainly seen. In a deep rich soil the roots go down—down in the cool moist earth—and thrive amazingly.

La France and its varieties give full sized perfect blooms in the hottest weather. You can hardly say this of most of the other roses. La France comes mostly a lovely soft pink at this season under glass; Duchess of Albany a bright clear color that does not quickly fade as in winter. Augustine Guinoiseau (white La France) satin white or light flesh tint, has come to stay and is a very satisfactory "light" rose. For myself I object to the weak stem of Mme. Caroline Testout. Niphetos endures summer heat well, and is much sought after. Perle is good when well taken care of, and so is Meteor. Mme. Hoste and Mme. Pierre Guillot are satisfactory when well done, and very lasting when cut, quite a desideratum in summer especially. I would recommend special treatment for American Beauty when wanted for late summer use at the large watering places. Plant out good stock first of May in benches, as for winter, instead of solid beds, a whole house to itself for profit, and push it right along. It is to be expected that the good blooms produced will bring a figure proportionate to the expense incurred.



CHURCH DECORATION.

I notice what you say about greenhouse structures in June 22 issue as especially related to roses. Some of these old houses that are not light enough for winter roses would do admirably for summer use; no trouble then as to light and heat! The florist is something like the farmer, always tempted to do a little more than is wise—pulling down his barns to build greater, etc. Using what you have to the best possible advantage, will usually bring in better returns than as if you spread out more and fail to give the extra attention needed. This is no "penny wise pound foolish" doctrine, but actual fact. We hear much lately about general financial depression all over the country; florists will do well to heed the "signs of the times"—festina lente! A conservative course will keep you "right side up" anyway, unless an unexpected hail storm puts in an appearance.

"Perish that thought! No, never be it said
That fate itself could awe the soul of Richard."

A Pretty Church Decoration.

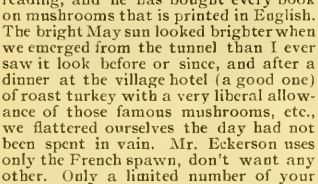
Our illustration shows the decoration in the church at Falmouth on the occasion of the recent Fiske-Hammond wedding. The arch was made of white and pink pæonies with English ivy sprays and laurel. A dado of the same material extended completely around the church. The pulpit and reading desk seen on the left were tastily decorated with plum blossoms. The bunches on the ends of the pews were of hydrangea blossoms, and the same material was used in the font. The flowers about the front of the altar are La France roses in vases, and the altar rail was lavishly decorated with La France also. The train which carried the guests from Boston was loaded outside and in with flowers, as also were the conveyances from the train to the church. The bride's carriage was hung with heavy garlands of Bride roses. The work was executed by Norton Bros.

Mushrooms.

In the pretty and thriving village of Akron, Erie county, New York, lying on a limestone ridge and situated about twenty-two miles from Buffalo, there is an industry flourishing of which few are aware except the villagers and the people who buy the product. It is mushroom growing on a large scale. These same Agaricus campestris are so large, so fat, so heavy and meaty, in fact so different from those grown on the surface of the earth I thought perhaps a brief description of the conditions under which they are grown might interest those of your readers who utilize their greenhouses for that purpose. Millions of barrels of cement (water lime) have been sent out from the village of Akron, and to produce this thousands, perhaps millions, of cords of limestone rock have been excavated. Where the limestone is found with but a few feet of flint and earth covering it it is quarried in the usual way, but where there is twenty to thirty feet to strip off before reaching the limestone it is cheaper to tunnel into the rock. The layer or strata of limestone in the cave in which the mushrooms are growing was eight or nine feet thick, and does not follow the undulations of the surface of the earth above, but ran as near as possible level, and in many places both floor and ceiling in many square acres is as smooth and even as an asphalt pavement. We had the pleasure of being guided into these "darksome caves" by the genial proprietor himself, Mr. Irving Eckerson. He held the torch while we looked where to step, for it was not all asphalt pavement. Some friends with me were inclined to chat a little on the journey into the bowels of the earth; my weak intellect was fully absorbed in contemplating where we should be if the candle went out. After a tramp of three or four hundred yards in Indian file our footing became better, and of a sudden the familiar odor of the chief ingredient which goes to produce mushrooms struck in full blast. The caves we were in were perhaps twenty or thirty acres in extent, but Mr. Eckerson uses but three or four acres, and of course has chosen the dryest part. Hundreds of beds were there, and in ten different styles; some of them were in ridges sixteen feet long, three feet wide at the bottom, running to a point about two feet six inches high, but those Mr. E. says he has about abandoned, preferring the flat bed, which is neatly held together by hemlock boards and is sixteen feet long, six feet wide and eight or nine inches thick. There is just room left between each bed to walk and pick the mushrooms, and everything is as neat and clean as the decks of a man of war (out of action). Mr. Eckerson puts no earth on the manure. I fired no questions at him about his methods of doing this and that; I had sympathy for him, because I know what it is myself. There were beds

in all shapes, some being made, others just spawned, some just coming in, and others covered with great big snow white fungi as big as a baby's head, and about as heavy. They are shipped in handle baskets holding about six pounds, and they mostly go to New York City and Chicago. The price to Mr. E. when I was there (May) was one dollar per pound net. I asked when they were in most demand and when they brought the best price, and strange to say it is July, August, September and October. In winter and spring Mr. Eckerson has what he calls greenhouse mushrooms to oppose him, but in the warm weather greenhouse mushrooms are "not in it;" they are wormy and the cave grown beauties are in great demand. After inspecting Mr. Eckerson's neat little frame office, which is nearly a quarter of a mile from the light of day, we retraced our steps, and knowing the road we emerged much quicker than we entered. You will be asking how it is the roof does not fall in with its millions of tons of rock and earth above. Every thirty or forty feet the quarrymen left a natural pillar of stone four feet thick, and in addition to those there are thousands of supports made from the section of a stout maple or elm. I forgot to say that so uniform is the temperature that in winter the thermometer never goes below 55° and in the warmest summers never above 65°. This is of course the secret of the success, supplemented by a few "wrinkles" which Mr. Eckerson says he paid by experience to learn, and which he never could find by reading, and he has bought every book on mushrooms that is printed in English. The bright May sun looked brighter when we emerged from the tunnel than I ever saw it look before or since, and after a dinner at the village hotel (a good one) of roast turkey with a very liberal allowance of those famous mushrooms, etc., we flattered ourselves the day had not been spent in vain. Mr. Eckerson uses only the French spawn, don't want any other. Only a limited number of your readers are likely to have an abandoned stone quarry on their place, at least not acres of it, but those who have should profit by this, for the demand for this luscious fungus is far in excess of the supply. WM. SCOTT.

Buffalo, N. Y.



Cattleyas.

It is remarkable in the face of the immense importation of these orchids that further importations should be necessary with declining demand and that gardeners who know "all about growing them" should reject small pieces, and object to cutting up large ones. Surely the best test of the adaptability of any plant to a given climate, or given cultural conditions, is the ease with which it will reproduce itself. The facility of reproduction depends primarily (as every gardener ought to know) upon a healthy and vigorous root action, and it is precisely in that respect, that cattleyas after a year or two of "culture," fail. Visit any of the *older* collections, no matter where, and houseful after houseful of plants will be found with little but old bulbs, annual growths more and more enfeebled, and with fewer and fewer flowers.

Buy! Buy! is the remedy of the expert cultivator, and it must be kept up, as it is with tulips and hyacinths, if flowers are desired in any quantity.

Perhaps it is impossible to supply the requisite conditions of heat and varying humidity, as it is certainly impossible to supply the solar light and heat, and the natural anchorage for the roots.

But how wonderfully little is known to gardeners, or anyone, of these cattleya climates, each species with a different one no doubt, as the behavior of the plants testify.

It is impossible to get the data, it is not in existence. The South American countries cannot afford to keep observers recording meteorology for the benefit of cattleya fanciers, and the growers must needs continue to imitate each other as best they can. It is astonishing however, how very *mechanical* many growers are. To be sure they have little stimulus to original research or investigation, for the only requital they can expect for anything of the kind is utter inappreciation, and possibly even worse than that. I have known investigators kicked out for their pains and informed that some oddman or other was held in higher esteem than they.

Cattleyas are collected from all known stations, and housed in a little hothouse or two, always of course under the influence of the climate in which it is situate. They cannot all succeed. The following data will give a fair idea of their behavior. The (,) indicates interruption to growth, the — continuity. The figures from 1 to 12 indicates the months.

Cattleyas.	Growth	Roots.
Amethystoglossa	5—12 & 10—1	1,5,11
bicolor	5—9	5—12
Bowringeana	5—9	9—10,11,12
Citrina	7—9	1,5,9
crispa	7—12	2,11,12
Dowiana	5—8,10	5,10,11
D. aurea	4—8,10	2,5,10—11
El Dorado	6 8	9,1
Gaskelliana	1—7	1,11—12
Gigas	3—8,9—12	3,11
G. Sanderiana	1—4	1—2,6,9—12
G. imperialis	2—7	2,9—12
Harrisiana (a long liver)	2—6	5—7
intermedia	6—8 & 10—12	6,8, & 11—12
i. amethystina	5,8, & 10—12	7, & 11—12
Lawreuceæ	7—11 & 10	5,9
" (second year)	9,	10
labiata speciosissima	5,9	1,9,10—12
labiata s. Ernestii	6—9, & 10—12	1,9,10—12
luteola	4,8	3,8,9—12
marginata	3,10	3,6,9—11
maxima	3,8,11	1,5,8,12
Mendellii	7—11	1,5,8—11
Mossiæ	5,8—11	1,5,9—11
Percivalliana	5,8	1,5,10—12
*Schilleriana Regnellii	11,4	1—7, & 10

*This difficult species flowered so finely after having been cut into small pieces of three bulbs each, and grown on from them for 3 years, that Mr. Ed. Low pronounced the plant the finest he had ever seen. But by this time the block was rotten and the specimen had to be rebuilt; the following year it behaved quite differently—thus: C. S. Regnellii G. 7—9 & 12— R. 1,5,8. It will be seen that the natural period of growth seems to be 11—4, and during that period it simply requires soaking.

	Growth	Roots
Skinnerii	5—10	5,8,10—12
superba splendens	3—7 & 8—11	1,5,8—12
Trianæ	5—12	1,5—9,10,12
" (next season)	5—12	1—8,11
Trianæ Schroderæ	5—12	1,5,10—12
Trianæ var.	1,5,11	6,9,10
velutina	4—8	1,5,8,10—12

There is one deduction evident from this exhibit, viz: that when the humidity of the hothouse is dissipated by ventilation, or the combined effects of hard firing and the condensing effect of cold glass it tells at once upon the root action. It will be seen clearly that most of the cattleyas root best and most uninterruptedly from October to December, and more or less imperfectly during the periods of extreme ventilation and cold. Neither material, or the shape of baskets or pots have anything to do with this, providing natural laws are not violated, expert opinion notwithstanding. Expert opinion is often strangely untrustworthy. I heard one of these worthies declare sometime ago that he and another spent weeks removing scale from a lot of orchids, every-one of which had been dipped in kerosene emulsion a week or two before; every scale was dead, and could have been removed with the hose in a single day, but the expert seemingly didn't know it.

I should be glad to include a resume of South American climatology of which I have collected much data, but as very little of it applies with certainty to cattleya stations it would be of little special value.

There is one set of deductions to be arrived at by the study of some thirty returns however, and they are that cattleyas grow in climates very much more decided in all particulars than our glass houses afford them, and there are few of the stations with an average winter temperature below 70° Fah. Even Quito registers 59.72° for that period. Bogota again registers 59.18°, and the city is high above the Pacho Valley where the crack varieties of odontoglossums are often said to come from. Rio de Janiero, near where some cattleyas have been found, gives 72.37° Fah. as the average of the three coldest months.

Cattleya "experts" have a great deal to learn yet.

It will be said that average temperatures are misleading, but the average minimum for a tropical plant cannot be much departed from with impunity.

Trenton, N. J. JAMES MACPHERSON.

Grafting.

BY JACKSON DAWSON.

For magnolias the best species to use for stock is either acuminata or umbrella. The acuminata I think makes a stouter and more lasting plant, but umbrella being more fibrous rooted is more likely to stand transplanting than acuminata. Umbrella is more inclined to sucker, which is its greatest fault. For all forms and varieties of the tulip tree, such as fastigiata, acutiloba and variegata the only stock to be used is the common form.

All the berberis family do well on the common B. vulgaris except the mahonia section. These do best rooted from layers or soft wood cuttings. In fact all the berberises would be better from cuttings where possible, as vulgaris suckers like everything.

All the lindens can be easily grafted on Tilia Europæa or Tilia Americana. I think Americana makes the better stock of the two, as it is a stronger growing tree and is less subject to attacks of borers.

Vitis Labrusca and V. æstivalis make best stock for all varieties and species of grapes. There are a great many scarce varieties of grapes that do not root freely from hard wood cuttings, and it is best to graft these on strong growing varieties in such cases.

All the varieties of Euonymus (Evonymus) succeed best on E. Europæus.

In maples, Acer pseudo-platanus does well for all varieties of pseudo-platanus and platanoides. Another good stock is A. dasycarpum. While these two

GROUP OF VASES, FILLED THREE DAYS. THE CENTER ONE IS AN IRON RESERVOIR VASE. THE OTHERS ARE RUSTIC WORK OF DIFFERENT HEIGHTS, AND WERE ALL FOR CEMETERY USE.

stocks can be used for most maples yet the majority of Japanese maples will not work readily on any other species except Acer palmatum or A. Japonicum (usually known as A. polymorphum). With the possible exception of A. cratagæfolium and rufinerve they will do well on our ordinary striped bark maple (A. Pennsylvanicum). Acer circinatum of Oregon would, I believe, make a good substitute for the Japan maple. I have never had a good chance to try it, but the indications are that it would be a success. There is one maple, Acer pulcrum, that we have been unable to find any stock on which to either bud or graft it. I have tried it on everything I could think of but have not struck it yet. Other parties have had the same experience with it.

Robinia pseudo-acacia is good stock for all varieties of robinia, whether viscosa, hispida or Neo-Mexicana. While most of the cytisuses are best on their own roots they make very pretty small standards if grafted on the common laburnum. All varieties of wistaria are easily grafted on the roots of the common Wistaria Chinensis. Caragana arborescens is as good as anything we can get for the caraganas.

Although most of the viburnums grow readily from cuttings yet they will make strong plants more quickly if grafted on V. dentatum. This makes a first rate stock for them. V. opulis nana makes a beautiful little standard grafted on V. opulis. A very pretty effect is produced by grafting Lonicera Albertii on small high standards of L. Tartarica. In this way you get a handsome half pendulous shrub.

For the species and varieties of catalpa C. speciosa is the hardiest stock we have. Although not very long lived, very pretty plants of Tecoma radicans can be made by grafting on standards of Catalpa speciosa or C. bignonioides.

In the elm family we find that all forms of Ulmus campestris do best on its ordinary species (English elm). The same is true of the American elm. The Camperdown and all other varieties of U. montana do well on the English species, but even better on montana (the Scotch or witch elm). As in the majority of cases with grafted plants the nearer you can keep to the species the better they will do.

Quercus robur or its variety pedunculata is, I find, the easiest stock for most oaks, although the varieties of scarlet and red oak, such as coccinea, tinctorea and palustris, do better on Quercus rubra. But when seed can be got, they are best grown from seed. All the hornbeams and hop hornbeams do more readily on Carpinus betulæfolia (the European species) than on the American (C. Caroliniana) but where this cannot be had Caroliniana will do.

The European white birch (Betula alba) makes the best stock for the general run of birches, and Alnus incana for all the alders.

While many other things might be enumerated yet the above will be found to cover all the trees and shrubs in which people are generally interested and where grafting can be resorted to with profit.

Vases.

The accompanying engraving is from a photograph of a group of vases filled by Mr. Wm. Scott, Buffalo, N.Y., and shows the various styles of filling as practiced by him. The vases shown had been filled three days when photographed. We shall later on publish engravings of some of these vases after the plants have made good growth.

Miscellaneous Seasonable Hints.

There is very little to sow, or to reap either, in this very hot midsummer time, and after you have your roses, chrysanthemums, etc., planted, you will feel that you are entitled to a well earned rest. But don't let up till you have seen the painting of your houses well under way.

Several of the most successful men in the business paint the whole of their houses annually both out side and in. We all know how much easier it is to grow almost all plants well in a brand new house. If the benches have a coat of whitewash and the walls beneath the benches the same and the upper part of the structure a thorough washing with the hose and then a heavy coat of the best white lead, you have gone a long ways towards making practically a new house. It not only adds to the durability of the house, but destroys the spores of mildew and black spot that are resting round about, and must kill myriads of the germs or eggs of the insects that we are continually fighting. But of greater importance than the above is that with a bright coat of paint you get light, and light is what you are after. In these days, when progressive men are experimenting with the roofs of greenhouses at

every known angle to catch every ray of light that is possible, remember that a clean coat of paint will diffuse more light, whatever the shape of the house may be, than a dirty house of the most approved and latest style. It is absolutely necessary to go over the roof every two or three years, especially where you don't use the cap on top of the bar. There is bound to be a place for water to creep in in that small space between the glass and the wood. Some use the putty ball, some the stiff flat brush that engravers use to clean their plates and some a thin, flat, ordinary brush. Use whatever suits you best, but don't delay. It's hot on the roof now, but if you wait it is rainy in September and October, and you have many other things to see to then.

Freesia refracta are fine bulbs this year and very cheap. There is not much money in them for some of us, but they are a beautiful, sweet flower and there is always some call. Pot them as soon as received in 5-inch pots, 7 or 8 bulbs in each. You can then bring in a few pots at a time. Plant in rich soil and place outside in a frame. Cover with boards to keep the fierce sun off them till they are well up and don't cover them with any material, as you would tulips, etc. Freesias will stand a pretty good freeze without harm.

I spoke last spring of the show pelargonium as a plant that was fast returning to popular favor. Eighteen years ago we grew several thousand of these showy plants and they sold well as a market plant. They were gradually falling away in popular favor as the immense improvements were made in the zonal pelargoniums. For 10 years past there has not been 50 good pelargoniums grown annually in this city, and the same could be said of many other cities, I am sure. There has been great improvement made in the varieties this past 10 years. The regal type is grand. I will just mention one variety—Duchess of Teck, a magnificent white, a thrifty, clean grower. Thousands of them could be sold in any large city, and there are dozens of varieties as good in habit and of every shade of color that the pelargonium possesses. If you have no stock at all wait till September and buy young plants of those that have. If you have some old plants that have bloomed this summer and are about done, begin to let them dry off a little, but not enough to turn the foliage yellow. About the end of *this* month cut the old plant down—don't be afraid to cut them close—leaving only two or three eyes on the stems of the plant. Every piece of the plant you cut off will root, except perhaps the very hardest. Cut them into pieces with two eyes, or three is better. I have propagated them both by putting them in the sand in the usual way and sometimes potted them at once in 2-inch pots in light loam. Either plan will do. Keep them shaded and in the coolest house you have. Keep them only moderately moist; just the happy medium is right. They will show roots in about three weeks, and as soon as they have made a good growth shift them into 4-inch pots in good rich loam and encourage them to grow all you can till November. When the dark weather comes there is no better place for them than a shelf near the glass in a cool house. If you have not that then the lightest bench you have must do, and if they are kept at 40° to 45° that is plenty warm enough for midwinter, and they will thrive when cool with very little water. At the end of February or early in March they must be started into active growth again and put in the pots in which they are to flower. If you have wintered them in a 4-inch shift them into 5-inch, or very strong varieties into 6-inch. It pays well to drain the pots with a few broken crocks and a piece of green moss. They will start now into rapid growth and must have a more liberal supply of water. Pot them *firmly* at all stages of their growth. They will flower in May and June and some varieties can be forced for Easter. Constant fumigation is necessary and never let the foliage or flowers remain many hours damp or you will lose both. Fire heat and air in abundance is what they want in dull, wet weather. The old plants after being cut down must be kept *very dry*. In two or three weeks they will break at every joint, and when the young breaks are one inch long shake every bit of soil off the roots, trim the ends of the roots back an inch or two and pot in a much smaller size than they flowered in. These old plants started in a 4 or 5-inch pot in August can be easily grown to a diameter of three or four feet by the following June. This would be all right for a flower show but would not pay as a rule.

The black fly on chrysanthemums is as bad as ever this year. Very fine tobacco dust mixed with one third of bone meal dusted on them every two weeks will "fix 'em." WM. SCOTT.

Buffalo, N. Y., July 10.

The Proposed Floral Contest in August.

In view of the small amount of encouragement received the Chicago committee has deemed it best to abandon the project of an international contest in the arrangement of flowers at the World's Fair in August. The great stumbling block has been the fear of sister clubs that it would be practically impossible to obtain suitable material in August. Of course such material could not be bad at that time as would be available later in the season, but as the contest was to be one of skill in arrangement rather than of quality of flowers the local committee thought that sufficient material of fair quality could be had for the purpose in view. But it was made unmistakably plain that the lack of first class flowers at the season would deter nearly all possible contestants from entering the lists. The committee could make sure of only one contestant outside of Chicago, and as this would have brought the contest down to the level of a local exhibition it was deemed best to abandon the whole matter. Some talk was had of deferring the contest till later in the season when plenty of good material could be had, but it was felt that it would be practically impossible to get any large number of florists together for such a contest except at the time of the annual convention. The outcome is certainly very unfortunate, as the contest, if carried out successfully on the lines proposed, would certainly have been of great benefit to the trade.

New York.

"Here state that spring has come." This important bit of information formed the introductory lines of a certain plantsman's catalogue once upon a time. And in humble imitation I here state that *summer* has come. It is not exactly necessary to state it, any more than it was necessary in the case of our friend and the spring, but one must have something to start in on. The Greek who hies him to a wholesale flower establishment in New York at this time of the year must have something too to start in on. A dice box and a good pocketful of ten cent pieces will do, and when he shows up this combination he is very likely to be accommodated. Sometimes he goes out after an hour's experience with a lighter pocket but a heavier heart; sometimes it is the reverse. If the latter, then you will see him blossom out the next day in a new vest and pair of tan colored boots, and possibly next fall in patent leathers and a fur collar.

It takes but a few minutes to receive and dispose of all the flowers coming in to the wholesale stores these mornings. A few handfuls constitutes the whole daily production of some of the largest growers. It is just as well that there is no more, as there is little to do and less inclination to do it. The "buyers," those talented young men with eyes all round their head, who do the markets in the morning and make the necessary daily purchases of stock for the more pretentious stores come around from force of habit, buy a dozen or two of roses, a bunch of valley or so and do what they can to make life miserable for each other and the outlook gloomy for the Greeks. Stumpp's man, resplendent in green and gold, has only to put in an appearance and a whistling salute to the tune of the "Wearing of the Green" rings out, and Butler's boy is blamed for it all. If Stumpp himself and Doran chance to arrive together there ensues a wordy contest as to whether certain horses owned by these worthies are 22 years old or only 7, while Johnnie Wier, who does his own buying when there is anything to buy sits on the counter swinging his heels and gets in a word occasionally where it will do the most good. All who are fortunate enough to have a "place in the country," be they wholesalers or retailers, are making the best of their opportunity, and it is next to useless to call in the afternoon on any one of them expecting to find him in his store. But the New York florist who attends to his business in winter as it demands he should is well entitled to a good summer rest, for he has earned it squarely.

The *Brooklyn Citizen* has been interviewing Mr. Peter Mallon, of Brooklyn, on the present state of the flower market. In a lengthy article he quotes Mr. Mallon as saying:

> "Yellow and pink prevail the most. The beautiful yellow roses known as the Pearl de Jardin have been demanded most. The Pelagonien, or Lady Washington, rank next in popularity. There never was a greater demand for these two species or a poorer opportunity to meet it in the history of horticulture than during this season."

This is wonderful, but we do not believe Mr. Mallon said any such thing. Mr. Mallon should whittle out a club with knobs on it and go over and interview the *Citizen* man.

Isaac Buchanan, one of New York's most famous and best known of the old time florists, passed away on July 7 at the age of 89 years. He was sick but five days, and up to the time of this illness had always enjoyed the best of health. He was born in Scotland and came to this country when 16 years old, becoming identified at once with the business in which he was to make his mark. His first place of business was on East 17th street, and afterwards he opened a big establishment at Astoria and a store at 407 5th avenue. He retired from business a few years ago, Mr. J. A. Hammond succeeding to the 5th avenue store. Mr. Buchanan was highly respected and very popular with the trade.

Jno. Young returned from Europe Sat

AFTER THE HAIL STORM.

urday by steamer New York, greatly benefitted by his trip and ready to resume business with a will.

At the July meeting of the Florists' Club there was a good attendance. Secretary Young was at his post; also Mr. Dean, just from Chicago, and Mr. Mestanize, manager of the Grand Central Palace, where the fall show will be held, who personally tendered the club rooms in the Palace Building for a regular meeting place, which was accepted with thanks. The committee on floral competition at Chicago reported the plan inexpedient on account of the difficulty of procuring material such as required to do creditable work at such season.

Mr. John May was instructed to procure suitable badges for St. Louis trip.

Mr. O'Mara received a vote of thanks for his efforts on the S. A. F. committee on express rates, and words in eulogy of the late Isaac Buchanan were said by Messrs. May, Dean and Henshaw, who were afterwards appointed a committee to attend funeral on behalf of the club.

After the Hail Storm.

The accompanying illustration is engraved from a photograph of one of the greenhouses of the Heite Floral Co., Kansas City, Mo., taken after a recent hail storm. The picture is of the west side of the house, which was most exposed to the storm. There were only about 40 whole panes of glass left on this side of the house. On the east side the damage was not nearly so great, only about one-third of the glass being broken on that side. On houses running east and west the damage was about equal on both sides, nearly all the glass being broken. The double thick glass broke just about as quick as the single thick. The largest sized hail stones were about 9 inches in circumference. A piece of glass sent us by the above mentioned firm has a hole in the center about the size and shape of a hen's egg, which had been cut out by a big hail stone more neatly and evenly than an expert could have done it with a diamond.

Philadelphia.

Wednesday evening, July 6, the northwestern section of this city was visited by a terrific hail storm, which, together with an accompanying high wind and heavy falls of rain, did a great deal of damage. Those directly in the path of the storm suffered severely and it is a matter for congratulation to the rest of the trade that the confines of the storm were so limited. The storm came up suddenly and was of short duration, the fall of hail lasting about ten minutes.

John Westcott is perhaps the most unfortunate, he losing about 10,000 feet of glass. This, with the cost of reglazing, will, he thinks, about equal his loss in plants, which were very badly damaged, many of them being now worthless. There was no insurance.

His neighbor, Mr. Alburger, whose place is in the same block, suffered a heavy loss, estimated at 7,500 feet, and a great damage to plants, with no insurance.

Walter Fancourt, near by, will lose over 2,000 feet and a lot of plants. No insurance.

Julius Wolf, as well as Julius Wolf, Jr., his son, whose places were but a few blocks apart in the same neighborhood, lose about 2,000 feet each and suffer a considerable loss in plants broken. No insurance.

Saunders of Roxboro loses about 1,000 panes. No insurance.

Mr. Mecky, 17th and Erie, had 600 to 800 panes broken, while Campbell & Kennedy, some three blocks away, lost 500.

Mr. Bishop of Wissahicken, lost 900 lights out of 2,500. No insurance.

John Welch Young, Germantown, lost about 3,000 feet, while his neighbor, John Savage, lost 1,000. No insurance.

Billger & Blakeborough, same neighborhood, lost 300 panes, single thick, no double thick being broken.

Frederick Krebs of Bellgrade street had 1,200 feet broken, but Frederick was wise enough to be insured and will suffer no loss. He had considerable damage done by the storm of four years ago, but as he had just joined the Hail Association, they took good care of him, and the chances are that Mr. Krebs will continue to be found a member in good standing.

At Bala, David Bearn says it will require about four boxes to fix him up, while John Haubert, his neighbor, loses probably 300 feet and a lot of sash which were caught up by the wind and whirled about until they were practically worthless.

Faust Brothers, a few blocks away, have ordered fifty boxes of glass and think it may take a lot more before the houses are repaired. No insurance.

At H. A. Dreer's seed trial grounds, same neighborhood, the seed crops were all destroyed, as was about 1,000 panes of double thick glass. The loss is estimated at $2,000. No insurance.

Dennison Brothers, also at Bala, place their loss at 2,500 panes. No insurance.

The greatest damage done by the storm was at Habermehl Brothers, 22d and Diamond streets. They had 18,000 feet of glass surface and of this the hail destroyed about 80 per cent. A shed with a glass roof connects the houses at one end; this is 8 feet wide and 150 feet long, and there are but 23 panes of glass left in it. In a small sash house there is one place where six sash side by side have not a pane left in them. These gentlemen suffered severely from a similar storm about four years ago, and when the houses were repaired immediately took out a policy of insurance on both glass and stock in the Florists' Hail Association. This will almost cover their loss, and they are to be congratulated on their wisdom and forethought.

In other localities in the neighborhood of the storm center quantities of hail fell, but fortunately it was too fine to do any damage. But it scared some growers almost out of their boots, and their first thought was, why didn't I take out a policy in the Hail Association? And we presume that there will be a number of

"jiners" from this vicinity in the near future.

It is hardly worth while speaking of business, as the little riffles that ruffle the surface of the summer sea are scarcely noticeable. Roses are very poor and in fact all stock, with the exception of sweet peas, shows the effects of the heat.

Sweet peas are very plentiful and the growers have a hard job to get rid of their stock. Fifty cents a hundred is asked, but they can be bought for almost any price in quantity. Tea roses sell for from 2 to 4 for the best. Lonsdale still has a few Beauties which command 20. He is also cutting some very nice Malmaison, with which he has a front bench planted for summer cutting; he is much pleased with it for this purpose. Carnations sell for $1, which insures the choice if there is any; valley 4, smilax 15, asparagus 50, pond lilies 50 cents a hundred, white hollyhocks 75 cents to $1 a hundred.

John Shellem of 17th and Tasker is obliged to move. The Board of Education want the location for a school house, and having the right of "Eminent Domain," John has to pack up and go. We hope he will be well paid for his ground and the moving. He has not as yet determined as to his future location.

The matter brought up at the last meeting of the Florists' Club as to who should bear the loss in the event of damage by hail, landlord or tenant, seems to us to be a question that the national society might discuss with profit, and if necessary have prepared a hail clause for leases that would be equitable to both parties.

The regular meeting of the Florists' Club was held at Donaldson's, Broad and Filbert, Thursday evening, July 6, and was very well attended. Chicago seems to have claimed President Craig, who has been in that city for the last five weeks. In his absence Vice-President Ball occupied the chair.

Mr. Westcott reported that all they were able to get out of the insurance company was $311.45. He felt that they had been swindled, as the company would pay for nothing but what was written in the policy. The pictures, which were considered furniture when the policy was taken out, were not seen in that light when the claim was made and so it was in other instances. The policy was for $1,000.

A letter was received from Secretary Stewart, who wanted to know what the club had done in the matter of transportation to the coming convention. He wanted if possible to get all those who intended going to take the same route so as to get the best possible rates. A committee consisting of Messrs. Westcott, R. Craig, Burton, Ball and Kift was appointed to attend to the matter of transportation and hotel accommodations and call a special meeting when they were ready for action.

Mr. Westcott called the attention of the boys to the bowling match and spoke of its importance at this time, when they had a half grip on the Spaulding cup. He proposed that George Anderson be made captain of the team that would be selected, which was unanimously agreed to, with the exception of a shady no, which seemed to emanate from the aforesaid gentleman's whiskers.

Mr. Walker having declined to read a paper on his trip to Europe a question box was opened. The first: "Who should repair damage caused by hail, the landlord or tenant," caused considerable discussion. Mr. Lonsdale, to whom the question was referred, said he did not know, but thought the landlord could not be compelled to bear the expense. Mr. Harris thought it was the owner's place to keep the buildings in repair and he would be obliged to foot the bill. Mr. Farson said he was interested in the case and he did not think the landlord would be compelled to bear the loss. Mr. Cartledge said that in 1870 Pennock Brothers were tenants and the houses occupied by them were badly damaged by hail. They had no trouble, however, as their landlord immediately repaired the damage without cost to them. He thought that if the tenant put up any additions he would have to keep them in repair, but the landlord would be required to look after the original houses. Mr. John Smith said it depended much on the wording of the lease. In a property rented by his firm there was a clause that in case of necessary repairs the owners of the property furnished the material while they were required to do the work. Mr. Kennedy, of Campbell & Kennedy, thought the tenant should bear the expense. They had lost about 500 panes of glass but would not trouble the landlord about the matter. When Mr. Westcott asked him what they would have done had the loss been 5,000 panes or more Mr. Kennedy did not know, and began to see things differently. Mr. Westcott said the tenant paid rent for houses in good order, but when the storm left them in such a condition that it would cost one, or perhaps more than two years rent, to put them in repair, he didn't see how the landlord could expect the tenant to put all this money into houses that were not his own. Mr. Bishop, who lost about one thousand feet, raised quite a laugh when he said that he had been advised by a Teutonic friend to sue the city. On the night of the 4th the city gave a grand display of fireworks and his friend said "Dem fireworks caused the storm, shootin off dem big bombs and tings I tell you was what did it, and I'd make 'em pay for it."

"Have the growers the best end of it?" was given to Mr. Westcott to answer, and in the light of his present experience his fellow members had the laugh at his expense. He said that prior to the storm he was well satisfied with his experience as a grower, and while he had had a heavy loss he hoped to work hard and get everything in shape as soon as possible. The place had been established a long time, 18 or 20 years before he got it, and this was the first serious loss from hail, and if it would hold off another twenty he thought he would be satisfied to be a grower. K.

Reading, Pa.

Hoskins & Giles lost about 5,000 feet of glass in the recent hail storm, about one quarter of their entire glass surface. The houses were of the three-quarter span style and the most damage was done to the short span toward the north. In the houses palms were badly damaged, especially the cycads. Outside plants were sadly injured. Carnations that had been planted out early for summer bloom were cut clean off and a lot of chrysanthemums were badly cut. Where the glass was double thick only 2% was lost, the main loss being of the single strength.

J. C. Hepler and Geo. W. Beers each lost about one fourth of their glass. J. J. Hinnershots was out of the range of the storm. J. B. Moore was so sheltered by high buildings that his loss was slight.

About eight miles south of here the storm was very severe. A fine range of glass belonging to Mr. Geo. Brook was totally destroyed, as was also that of Mr. E. Brook. All the plate glass windows in the side of their residences that faced the storm were broken, and their vegetables and fruit suffered severely. On these estates the damage amounted to many thousands of dollars. H. & G.

Boston.

The horticultural exhibition of July 8 was notable for the fine larkspurs shown by R. & J. Farquhar & Co. and others, the native flowers from Mrs. P. D. Richards and W. E. Coburn and the hybrid roses from J. S. Fay and C. W. Parker. Lilium Hansoni, shown by B. K. Bliss, was much admired. I. E. Coburn exhibited a fine collection of pelargonium blooms, and there were good Kæmpferi irises from several contributors.

There have been several funerals of prominent people which have furnished considerable work for the florists during the past week. One of these was the funeral of S. S. Houghton of the firm of Houghton & Dutton. There was a great display of flowers on this occasion, including a number of very large designs. Apart from this the flower trade is very dull. The demand from the seaside resorts has not been heard from yet.

Mr. M. H. Norton had a birthday on July 8. It goes without saying that he received congratulations and good wishes innumerable, to all of which he simply responded thus: "Here's hoping that you'll live as long as I will."

J. B. Kidd of Sherwood Hall Nursery Co., all the way from California, has been in town visiting his old friends the past week. Among them was Wm. Miller of Lynn, whom Kidd has named "the millionaire florist" and who was so much impressed by the stories of California life to which he listened that he is going to see for himself, returning in time for the St. Louis meeting.

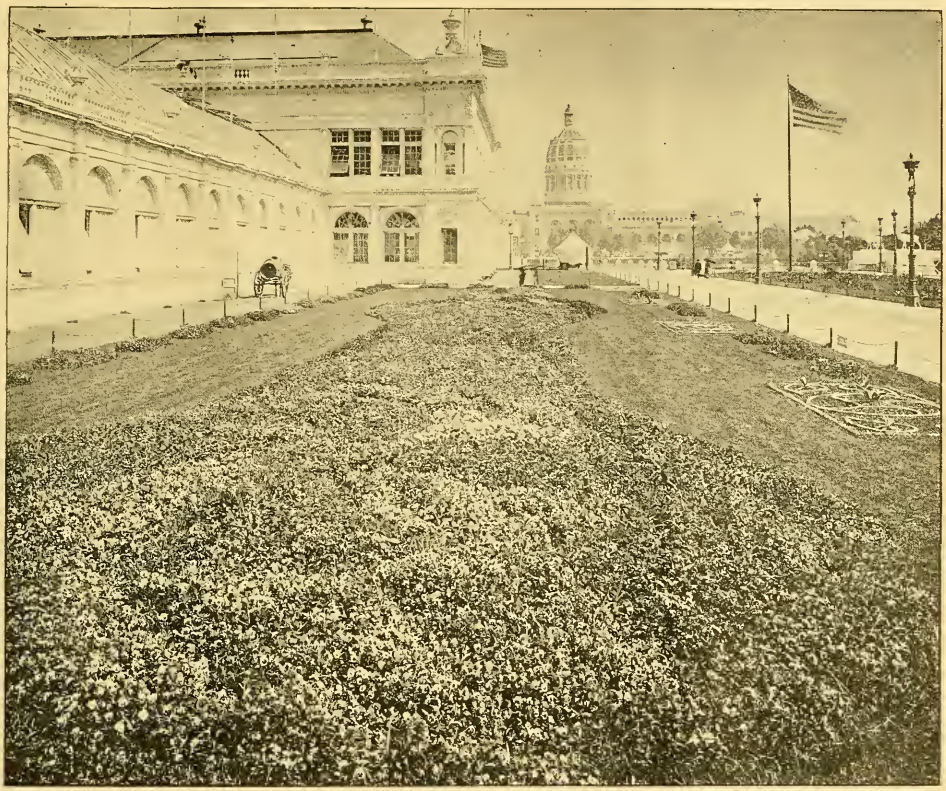
The representation from Boston at the convention will be larger than was anticipated. The route and the rate of fare have not been definitely settled yet, but will probably be announced in next week's paper.

Chicago.

Business is very quiet, flowers are plentiful and prices low. Roses are improving in quality, as flowers from young stock begin to come in. Niphetos, Perles and Pierre Guillot are the best in quality, though we see some good Beauties. Carnations are still plentiful, but there is quite a falling off in quality; they are smaller, flimsy and losing color. A good many of them will be thrown out before long and there will then be a slackening in supply. Sweet peas are a glut; they go for any price offered. It seems as if everyone is now growing them, and the price dropped very suddenly. Another cheap thing is the cornflower; they go for 20 cents a hundred.

Gladiolus is coming in more rapidly; it is fine and brings a fair price. Fine Lilium auratum comes in, also L. excelsum and L. candidum; the last named is very plentiful, but small, and does not bring much. The dark orange day lily is seen, but it is not much in favor. Valley comes in slowly; the quality is generally mediocre. Mignonette is poor, and there is little demand for it. There is no steamer trade here to encourage the retailer and everything stays at a dead level of dullness.

Among recent visitors were A. N. Kinsman, Austin, Minn.; W. S. Hizer, Rockford, Ill.; Mrs. S. E. Luther, Lawrence,



PARTIAL VIEW OF ONE OF THE BIG PANSY BEDS AT THE WORLD'S FAIR.

Kans.; A. W. Morgan and daughter, Danville, Ill.; R. E. Simons, New Orleans; Emil Glauber, Mount Clair, Colo; Mr. and Mrs. J. B. Stewart, Omaha, Neb.; Miss C. Arnold, Omaha, Neb.; J. R. Hellenthal, Peter Hellenthal and Miss Barbara Hellenthal, Columbus, O.; Mr. Keller of Reed & Keller, New York; Mr. Weeber of Weeber & Don, New York; Mr. and Mrs. Geo. A. Rackham, Detroit, Mich.; Geo. E. Jewett, Cleveland, Ohio; W. H. Drake, Kenosha, Wis.; D. F. Hawkes, Wheaton, Ill.; Mrs. John Reading and three daughters, Salt Lake City, Utah.

St. Louis.

Nothing much duller than the past week can be realized in the cut flower trade. Strange to say, the supply keeps up despite the replanting which is going on everywhere. One of our wholesalers, upon being asked how the market was, said he had been trying to find it for a week, but as yet had no trace of it. Replanting is going on everywhere and will be finished in a short time. Chrysanthemums have of late been receiving considerable attention from the growers, and the talk seems to point toward a good display of both plants and cut flowers at the fall show.

The exhibition committee held a meeting during the week and have about closed with the exposition managers for the use of the "Grand Music Hall" upon the same favorable terms that prevailed last year. This is something to be desired, as there is no doubt but that the extremely liberal terms upon which we have had the hall for the past two seasons have gone a long way towards making the show the financial success it has been.

At a meeting of the members of the bowling club an offer was received from the Pastime Athletic Club of the use of their club house and bowling alleys to the St. Louis Florists' Bowling Club, for the purpose of holding a tournament between the home and visiting bowling teams. The offer was accepted by the club and a vote of thanks tendered the Athletic Club. The boys are still working away and a gradual improvement is noticed in the scores. R. F. T.

Baltimore.

If the weather gets much hotter it will come as near breaking the record for heat as last winter did for cold. Sweltering is the only term that expresses the past few days, and the dejected looking individual that spends his time dodging in and out of greenhouses is not more forlorn looking than the weather justifies him in being.

Of course flowers, as the boys say, "are not in it," for the few that are around are kept on ice and they are only handled to keep in the habit anyway, as the market has gone to the bow wows for the time being.

It affords time to do up the houses, though, and if money is not to say streaming in there is generally plenty out to be gotten in, if you can; so between getting in coal and getting out bills August will soon be here.

Sweet peas are still plentiful and good at twenty-five cents a hundred. Hollyhocks are bringing fifty cents. Perles and La France, about the only offering in quantity, are two and a half to three cents. Asters are showing in fair quantity. Smilax is plentiful. MACK.

IN VIEW of the continuance of hail storms it may not be out of place to put on record for the benefit of possible victims Mr. E. C. Reineman's method of protecting one's person from falling hail and glass. Mr. R. was in the far end of one of his houses when the hail struck his establishment in Allegheny, Pa., and the falling stones and broken glass made progress to shelter not only difficult but dangerous. But a carrying board lay on

the bench near by, so he caught it up and made use of it as an umbrella until a lull occurred. We are sorry we could not have had a picture of Mr. R. sitting under his improvised shelter so as to show the apparatus in practical operation, but he didn't seem to be favorably impressed with the idea of having his portrait taken in that position.

Where are They?

Where can one get small ferns, selaginellas, etc., for filling trays, pans, etc , for dinner tables? Although the demand for this class of goods is not steady in one sense of the word, yet a very large quantity is annually consumed, and at some periods of the season great difficulty is experienced in getting just what you want in this line. Now it seems to me that if one knew where he could procure nice, clean, healthy little plants of Pteris serrulata, P. serrulata cristata, P. cretica, P. cretica albo-lineata, P. tremula, P. argyrea, etc., Adiantum capillus-veneris, A. cuneatum and varieties, lomarias, cheilanthes and hosts of other kindred subjects, many of which might be named, but are well known to florists, they would be freely used.

By the way, several of the selaginellas, such as Martensii, M. variegata, S. apoda and S. apoda densa used to be in great demand for such work, but one seldom sees them now. Who carries this line of plants? I think many florists would be benefitted by knowing where they could procure goods of this class, at any rate round this locality.

BOSTONIAN.

When Orders on Nursery Firms Become Binding.

The Supreme Court of Michigan has reversed the Wayne County Circuit Court in the case of Bronson vs. Herbert. The Circuit Court held that the following order was a complete, valid, binding contract, and declined to admit proof of any of the circumstances of its delivery or the negotiations in relation to it: "Bronson & Hopkins, nurserymen, Geneva, N. Y.:—You will please have dug and furnish me the following nursery stock, for which I agree to pay the prices set opposite the respective articles, amounting to $1,255 in cash on delivery at Dalton, Mich., in the fall of 1891. Should any part of such stock be omitted, through miscount or otherwise, the price of such part shall be deducted. No countermands accepted. * * * It is mutually agreed that the stock in this contract is not warranted further than to be delivered in good condition, and the order not subject to countermand, and must be taken according to the printed condition hereon. Agents not allowed to plant stock when delivered, and no outside agreement or bargain by the agent shall in any way affect this contract. * * * Date, June 10, 1891. Agent's name, W. W. Essig. Full name of purchaser, C. S. Herbert. Purchaser's signature, C. S. Herbert." The words, "In consideration of the foregoing order, we agree to replace at half price at our next delivery all stock that fails to live, provided we are notified of such failure by August following the delivery thereof, and remittance for the stock to be replaced accompanies said notice"; also, "In case you cannot furnish all the specified varieties you may substitute others considered by you equally desirable," were erased in the order. Essig testified that the stock was delivered, accepted by Herbert and a settlement made, wherein it was agreed that the amount due was $1,255; that Herbert paid Essig a check for $500, and took a writing showing that $750 remained unpaid; that subsequently he obtained from him the draft that Essig had obtained from the bank for the check, under a fraudulent pretext, and afterwards refused to talk about the matter. Herbert, who resides in Detroit, claimed that the order for stock was part of an arrangement made in the spring of 1891 with Essig, whom he supposed to be acting for Bronson & Hopkins, to set out fruit trees on 40 acres of land in Muskegon county; that it was not all cleared, and Essig was to set out what he had cleared in the spring of 1891, and to furnish the rest when the ground could be prepared. He further claimed that no contract relations existed between Bronson & Hopkins and himself, and, further, that the stock furnished in the spring, and for which he had paid Essig, never came from them, and was worthless, by reason of which he had sought to set off the money paid for it, as money paid without consideration. This paper, the Supreme Court says, is an order on Bronson & Hopkins to ship the stock mentioned therein. Before it could become a binding contract between them and Herbert it was necessary that they, or someone authorized to bind them, should assent thereto in writing and give Herbert notice thereof. Essig's name, as appended to the order, was but a mere memorandum. This being true, it was a right of Herbert's to show the negotiations and conditions upon which the order was given. He sought to show that Essig, and not Bronson & Hopkins, was the real party in interest; in other words, that the latter were not the owners of the claim. No rule is better settled than that a person sued may show in an action at law that the party suing him has no cause of action against him. Hence it was proper cross-examination to ask Bronson & Hopkins whether they charged this stock to him upon their books, and whether he ever promised to pay them anything on the order, and where the money would go if paid, and what interest they had in Essig's sales, etc. Again, he was entitled to prove his set-off, if he could, and have the same submitted to the jury. If he had paid to Bronson & Hopkins anything, without consideration, in a prior transaction with them, it could be set off in this action.

Society of American Florists.

The distance between St. Louis and Chicago, as well as other considerations, render it impossible to take advantage of the customary concession on excursion tickets on the certificate plan as granted by the various passenger committees if delegates propose to visit both cities.

It is presumed that most of those in attendance at St. Louis will desire to go to Chicago at the close of the convention. The only way to secure reduced rates for such a trip is by direct consultation with the local representatives of the various railroads. There is already a very general tendency to cut rates to and from the World's Fair and the best plan will be for the Florists' Clubs or local members of the S. A. F. to appoint committees to attend to this at once. An effort will be made to run a special train through from New York and Philadelphia and the undersigned will thank members located on any of the routes between New York and St. Louis if they will communicate with him, so that the route may be so arranged as to accommodate the greatest number. State number expected to attend from point in question, preferences as to route, etc. The convention meets one week earlier than usual this year, so immediate action is imperative.

WM. J. STEWART, Secretary.

News Notes.

MORRIS PLAINS, N. J.—F. Welscheck has removed his business to Mount Tabor, N. J.

MUNCIE, IND.—The Muncie Floral Co. have begun the erection of four houses, one 18x100 and the others 10x100.

WHITMAN, MASS.—The residence of H. H. Barrows, the High street florist, was totally destroyed by fire on July 3. Only partially insured.

MOUNT TABOR, N. J.—F. Welschek, formerly of Morris Plains, has located here and has erected two houses, one 20x50 and the other 11x40.

ROCKVILLE, CONN.—W. F. Schmeiske has removed to Harrisburg, Pa., and is now with W. E. Machlin, corner of 11th and Mulberry streets.

BIRMINGHAM, ALA.—Williamson Bros. report: "Everything is dead here. Have had no spring trade worth mentioning. When they do buy the people want 5-cent plants."

MINNEAPOLIS, MINN.—At the meeting of the State Horticultural Society E. Nagel took first prize for roses and carnations, and F. G. Gould of Excelsior, second.

ST. ALBANS, VT.—The sum of $1,400 has been appropriated by the Franklin County Agricultural Association for the erection of a floral hall on the exhibition grounds.

SYRACUSE, N. Y.—The co-partnership of Sipfle, Dopffel & Co. has been terminated by the retirement of Conrad Sipfle. The business, however, will be continued by the remaining partners, William Dopffel and Conrad Breitschwerth, under the firm name of the Syracuse Pottery Co.

THE LEVIN PRUNER, sample of which was recently sent us, is noticeable for its handy shape and size and great strength of jaw. It is light, but extremely powerful, and has no complicated mechanism to get out of gear. It should prove a great convenience to rose growers.

WHEN SENDING us newspapers containing items you wish us to note please do not fail to distinctly mark the item so it can be easily found, as we can not spare the time to hunt through the mass of papers sent us for unmarked items.

DO YOU WANT an alphabetical list of the chrysanthemums in commerce in America, with class and a brief accurate description of each one, and synonyms noted? You will find such a list in our trade directory and reference book.

DO YOU WANT a list of the leading cemetery superintendents? You will find such a list in our new trade directory and reference book.

WHEN writing our advertisers please use one of your printed business letter heads or enclose your business card.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

BRIDESMAID.

Fine 3-inch plants at $9.00 per 100. Planters need have no fear of this rose sharing the fate of Waban, as it has proved itself a first-class rose. Some of the larger growers are planting it freely.

Meteor, Perle, Sunset, Gontier, Mermet, Bride, Hoste, and other forcing Roses now ready for planting, from 3-inch pots at usual prices.

M. A. HUNT, Terre Haute, Ind.

GOING.

Please write, stating just how many

BRIDESMAIDS

you wish, and I will quote you a bargain.

FRANK L. MOORE,
. . . CHATHAM, NEW JERSEY.

ROSES

For Forcing.

PERLES, BRIDES, LA FRANCE, etc.
per 100, $5.00; per 1000, $45 00.

ROMAN HYACINTHS, now ready.
VAUGHAN'S International Pansy Mixture, ready August 1, is a World Beater.

J. C. VAUGHAN,
146 & 148 West Washington Street, CHICAGO.

ROSES

All the leading and popular kinds for winter blooming, in 3-inch and 4 inch pots. . . .

SEND FOR PRICES.

Edwin Lonsdale,
WYNDMOOR, near Chestnut Hill,
PHILADELPHIA.

ROSES.

Fine healthy stock. Per 100 P. 1000
Perles, Mermets, The Bride, Sunset, Papa Gontier, Niphetos, Bon silene, La France, Souv. d'un Ami, Duchess of Albany, Mad. Cusin, Mad. de Watteville, from 3-in. pots, $8.00 $75.00
SMILAX, from 2¼-inch pots..... 2.50 20.00

Lots of other Fine Stock.
Send for new list.

WOOD BROTHERS,
Fishkill, N. Y.
Mention American Florist.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST. . . . . .
ANCHORAGE ROSE CO., Anchorage, Ky.

Mention the American Florist when writing to advertisers on this page.

ROSES. ROSES.

STRONG FIELD GROWN PLANTS; VARIETIES SUITABLE FOR FLORISTS' USE. LARGELY

GEN. JACQUEMINOT, MRS. J. H. LAING, ULRICH BRUNNER, MAGNA CHARTA, Pr. CAMILLE DE ROHAN, PAUL NEYRON, MARSHALL P. WILDER, ANNA DE DIESBACH, ALFRED COLOMB, ETC., ETC.

A FULL ASSORTMENT OF MOSS AND HARDY CLIMBERS.

TREE ROSES.

A splendid stock, fine smooth bodies, strong two year heads.

Our usual complete assortment of Trees, Shrubs, Bulbs, Plants, Etc.

CORRESPONDENCE AND INSPECTION INVITED.

THE STORRS & HARRISON CO.,

PAINESVILLE, OHIO.

30,000 FIRST QUALITY FORCING ROSES.

READY FOR IMMEDIATE PLANTING.

Fully equal to those sold last year, and perfectly healthy in every respect.

LA FRANCE, 3-inch pots, $9.00 per hundred; 4-inch pots, $12.00 per hundred.

SOUV. DE WOOTTON, MERMET, BON SILENE, MME. HOSTE, PERLE DES JARDINS, BRIDE, SAFRANO, MME. CUSIN, 3-inch pots, $7.00 per 100; 4-inch pots, $10.00 per 100.

SMILAX. Strong plants, 2½-inch pots, $2.50 per hundred; $20.00 per thousand.

J. L. DILLON, Bloomsburg, Pa.

FORCING ROSES.

Good Stock . . . 3 AND 4-INCH POTS.

AMERICAN BEAUTY, BRIDE, MERMET, BRIDESMAID, METEOR, PERLE, SUNSET, GONTIER, LA FRANCE. . . . . .

A. S. MacBEAN, Lakewood, New Jersey.

SOME ROSES.

		2½-inch	3-inch
PERLES	Per 100	$4 50	$7 00
METEOR, extra	"	5 00	8 00
MERMETS	"	4 00	7 00
BRIDE	"	4 00	7.00
LA FRANCE	"	4 00	
ALBANY	"	4 00	

BROWN & CANFIELD,
SPRINGFIELD, ILL.

ROSES.

PERLE, SUNSET, MERMET, BRIDE, GONTIERS, NIPHETOS, $10 00 per hundred.

CLIMBING PERLE, $12 per hundred.

All first-class 4-inch stock.

GEO. L. PARKER, Dorchester, Mass.

ROSES.

LA FRANCE, BRIDES, MERMETS, AND PERLES,
Strong, 3-inch pots, at $7.00 per 100.
LA FRANCE and ALBANY, from 2-inch pots at $4.00 per 100.
The above is good, clean stock, ready for planting.

ROBERT F. TESSON,
West Forest Park, ST. LOUIS, MO.

ROSES.

TEAS . . . . . $30.00 per 1000
HYBRIDS . . . . . 40.00 per 1000
Healthy plants, in 2-inch pots.
Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.
Trade list on application.

Jacob Schulz,
LOUISVILLE, KY.

ROSES,

STRONG PLANTS,
WRITE FOR PRICES.

Kemble Floral Co.,
OSKALOOSA, IOWA.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

Our Annual Convention Number.

In our Convention Number for 1893, which will also be a Columbian Souvenir as well, we shall repeat the plan of identification by portraits as inaugurated at the Convention in Washington last August. This plan solved the identification problem with such general satisfaction and was so generally made use of that we believe no explanation of its workings is now necessary.

Are you a member of the Society of American Florists? If so, do you expect to be present at the Convention in St. Louis next August? If not now a member do you expect to join while at the St. Louis meeting? If so, and you were not represented among the portraits given in our Convention Number of 1892, please send us a cabinet size photograph of yourself, being careful to write your name and address plainly on back of same. If you have no recent photograph, have one taken now, and send us a copy as soon as ready. If you intend to take your wife with you to the convention (and you ought to do so if possible) send us a copy of her photograph also, as our identification plan includes the ladies too. But do not send us photographs that must be returned. We have to cut them to get them into groups and of course the photos are spoiled thereby.

This number will contain in addition to the portraits and indexes to same, a complete guide, *at date*, to the Horticultural Department of the World's Columbian Exposition at Chicago, which will certainly be visited by all members of the Convention after the adjournment of the St. Louis meeting. Diagrams of each section of the Horticultural display will be given and the location of each exhibit plainly indicated so it may be quickly located by any one. These will be accompanied by an alphabetical index to exhibitors and a classified list of exhibits, each referring to position on the diagrams; together with fine half tone plates of special features.

Full details regarding the great Horticultural Congress will also be given in this number, and it will be such a "Columbian Souvenir" as you will want to preserve for all time.

THE DEATH of Isaac Buchanan, as noted in our New York news letter in this issue, removes from the ranks one whose recollections of the early days of the trade ran back farther than those of any other man. Speaking of Mr. Buchanan's demise, Mr. John Thorpe said: "He may be regarded as the last landmark of the older generation now passed away. He was but little known to the younger men of the trade, most of his intimates having passed away long before him. I knew him by correspondence long before coming to this country. He was the greatest commercial grower of camellias around New York when that flower was in the zenith of its glory, and he has told of selling camellias to the value of several thousand dollars for New Year's day, 'way back in the fifties. He knew many of the celebrities, theatrical and journalistic, of the last generation, and had an inexhaustible fund of recollection of happenings in old New York."

HAIL STORMS seem to be epidemic this year, and Pennsylvania has been getting rather more than her share. The Pittsburg florists are hardly through with the work of reglazing their riddled houses and now Philadelphia and Reading are among the mourners. We suggest that a committee be appointed to confer with the Government Weather Bureau and see if arrangements can not be made whereby the hail will be made to fall in places remote from greenhouse settlements. In the meantime a little more hail insurance might not be a bad idea. By the way—what has become of the "hail belt"?

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

NOTICE

— OF —

Stockholders' Meeting.

CHICAGO, July 10, 1893.

Stockholders of the American Florist Company:

You are hereby notified that the annual meeting of the Stockholders of the American Florist Company will be held at the Southern Hotel, St. Louis, Mo., Friday, August 11, 1893, at 2 o'clock P. M., for the purpose of electing directors and officers for the ensuing term, and for the transaction of such other business as may come before the meeting.

J. C. VAUGHAN, Pres.
G. L. GRANT, Sec'y.

JULIUS TESMER & CO.
Manufacturers of all kinds of
Ice Boxes
AND STORE FIXTURES,
937 to 943 N. Western Ave., CHICAGO.

CUT SMILAX,
15 cts. per string till November 1st. Quality first-class. Special attention to orders by wire.
J. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

WHOLESALE FLORISTS
La Roche & Stahl
N. E. CORNER
13th & Chestnut Sts.,
PHILADELPHIA.

SAMUEL S. PENNOCK,
Wholesale Florist
REMOVED TO REAR OF 42 S. 16th ST.,
Philadelphia, Pa.

WISCONSIN FLOWER EXCHANGE,
131 Mason St, MILWAUKEE,
WHOLESALE
Cut Flowers AND Florists' Supplies,
BULBS, ETC.

THE SMILAX KING!
Who? KOFFMAN,
Where? WALDEN, Orange Co., N. Y.
What? SMILAX
25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.
When? ALL THE YEAR AROUND.
And he pays the Express.

HARDY CUT FERNS
LAUREL FESTOONING, ETC.
The only place in the world where you can Always get them,
H. E. Hartford,
18 Chapman Place, BOSTON, MASS.

DO YOU USE FERNS?
Finest and Cleanest in the Land.
Hardy Dagger Cut $1 per 1000.
G. W. CURREY & CO.
Give us a trial NASHVILLE, TENN.

THEY SAY That ASPARAGUS PLUMOSUS NANUS
at 50 cents a string, 8 to 12 feet in length, is the cheapest and best material for decorating, as it will stand longer and look better than any other green in this hot weather.
ORDER IN LARGE OR SMALL QUANTITIES, FROM
W. H. ELLIOTT, Brighton, Mass.

Summer * Buds.
BRIDES AND MERMETS, 4 CENTS; PERLES, 3 CENTS. FIRST-CLASS STOCK.
Sample sent on application. Telegraph and Telephone connections with all parts of U. S.
ANCHORAGE ROSE CO., Anchorage, Ky.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.

	Per 100
Perle, Niphetos, Gontier	$2.00@$3.00
Brides, Mermets, La France	3.00@ 4.00
Meteors	5.00
Carnations, short	.50
" long	1.00
Adiantum	1.00
Valley	3.00
Smilax	12.50@16.00

Ferns, common, 30c. per 100; $2 50 per 1000.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
126 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.; Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange,
45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY,
Wholesale and Commission
FLORIST,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

A. G. PRINCE & CO.,
Wholesale and Commission
FLORISTS,
45 LAKE STREET,
In Chicago Cut Flower Exchange. CHICAGO.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES,
LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

Wholesale Market.

Cut Flowers.

NEW YORK, July 11.

Roses, Gontier, Perle, Niphetos	2.00
" Mermet, Bride, Hoste	3.00
" Custn, Watteville, Meteor	2.00
" Meteor, Bridesmaid, La France	4.00
" Rentoy	5.00
" Testout	8.00
Gladioli	4.00@ 6.00
Carnations	1.00
Valley	5.00@ 6.00
Sweet Peas, per 100 bunches	3.00@ 5.00
Mignonette	1.00
Candidum lilies, stalks	5.00
Adiantums	1.00
Smilax	12.00@15.00

BOSTON, July 11.

Roses	2.00@ 4.00
Carnations	.75@ 1.00
Lily of the valley	3.00@ 4.00
Peas	.05@ .10
Candidums	2.00
Ivy leaves	.50
Adiantum	1.00
Smilax	12.50
Asparagus plumosus	50.00

PHILADELPHIA, July 11.

Roses, Teas	2.00@ 4.00
Carnations	.75@ 1.00
Valley	4.00
Sweet peas	.35@ .50
Smilax	15.00
Asparagus	50.00

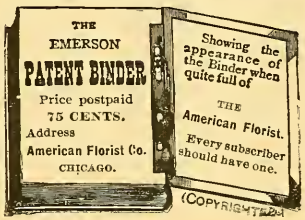
CHICAGO, July 11.

Roses, Perles, Niphetos Gontier	3.00
" Mermet, La France, Albany	4.00
" Bride, Wootton, Bennett	4.00
" Beauties	10.00
Carnations, short	.50@ .75
" long	1.00@ 1.50
" fancy	2.00
Callas	10.00
Sweet Peas	.25
Gladiolus	8.00
Auratum	10.00
Smilax	15.00
Adiantum	1.00

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

WHOLESALE FLORISTS,
JOBBERS IN . . .
. . FLORISTS' SUPPLIES,
FLORISTS' VASES.
METS, BRIDES, GONTIERS, CARNATIONS, ALWAYS ON HAND.
1 Music Hall Place,
BOSTON, MASS.
HORTICULTURAL AUCTIONEERS. . .
Mention American Florist

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., BOSTON, MASS.
Mention American Florist.



BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN
AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY,
Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
5 WEST 27TH STREET,
NEW YORK.
BRANCH: Cut Fower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
THE FINEST ROSES AND CARNATIONS.
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE
FLORIST,
1122 PINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STEET,
St. Louis, Mo.

The Seed Trade.

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1883. Applications for membership should be addressed to Wm. Meggatt, chairman membership committee, Wethers. field Conn.

THE South Wethersfield (Conn.) onion crop is reported badly damaged by hail July 1.

ONION SEED prospects in California are good, but radish, carrot and spinach will be light crops.

THE PRESENT stand of the vine seed and sweet corn crops in the Waterloo (Neb.) section is said to be excellent.

MR. E. GERMAIN of the Germain Fruit Co., Los Angeles, Cal., has been appointed U. S. minister to Switzerland.

THE CROP of Pearl tuberoses in North Carolina this season is reported lighter than usual, owing to the loss of many sets by freezing last winter.

VISITED Chicago: C. G. Weeber of Weeber & Don; George Carter of Charlottetown, Prince Edward Island, Canada; E. D. Adams, Wethersfield, Conn.

NORTH MICHIGAN growers report less than half a crop of extra early peas owing to drouth; medium and later sorts will be helped by recent rains. Beans look well.

IT IS REPORTED that Secretary Morton of the Agricultural Department will dispense with the free distribution of garden seeds through members of congress.

THE MILE LONG onion fields and the 20 acre fields of sweet peas as seen in the Santa Clara Valley (Calif.) are very impressive sights to the visiting seedsmen.

THE RATHER HEAVY stocks of red and yellow onion seed which have been carried over from last season are likely to start sales the coming season at panic prices. If a surplus should be harvested in California and thrown on the market the result would be favorable to very low prices. If the California growers keep their surplus off the market or do not cut contract rates the situation may be helped.

MR. F. C. HUNTINGTON, of F. C. Huntington & Co., seedsman, of Indianapolis, died June 29 of consumption. He started as store boy for Mendenhall & Co. some years ago. Later when Mr. Mendenhall desired to remove to California on account of his health Mr. Huntington bought his interest and started in to make the business boom, which he did successfully. Last year a stock company was formed and the business was greatly enlarged, making it a very complete seed and florist's supply house. Mr. Huntington sought relief for his ailment in Alabama, also took a trip to Europe, but his constant attention to his growing trade and a bad cold taken some time ago resulted in his early death. He was treasurer of the Society of Indiana Florists several terms and rendered valuable assistance in the annual chrysanthemum shows.

PREPARE NOW FOR OUR CONVENTION NUMBER AND COLUMBIAN SOUVENIR.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—By German gardener, either private or commercial place. Address
G. C. KRAMER, 116 Noble Ave., Chicago, Ill.

SITUATION WANTED—By an experienced gardener; many years experience as florist and gardener. Address M N, care American Florist.

SITUATION WANTED—By young man as florist or cut flower artist; 11 years experience. Good references. Address A. N. DEW, Lansing, Mich.

SITUATION WANTED—By a thoroughly experienced florist and grower in general nursery stock, as a foreman; age 38. A M, care AM. Florist.

SITUATION WANTED—In or near Chicago by German gardener. Would prefer to work on a per cent. of profits. Address K W,
care American Florist, Chicago.

SITUATION WANTED—By German florist; experienced in cut flower trade and general stock; 12 years' experience; age 27. Address
Box 90, Hinsdale, Cook Co., Ill.

SITUATION WANTED—As foreman by a thoroughly competent and all-round gardener, on commercial place. Life experience in the business. Address
N F, 754 Ullman St., Chicago, Ill.

SITUATION WANTED—By a single man; has had 12 years' experience growing orchids, stove plants, ferns, etc. Private or commercial. JOS. DUMAS,
Morgan House, Irwin Ave., Allegheny, Pa.

SITUATION WANTED—By first-class florist, commercial or private; married, small family; 24 years' experience in all branches; German nationality. Address P. O. box 1239, So. Evanston, Ill.

SITUATION WANTED—By a young Englishman, on gentleman's private place. Understands orchids, stove and greenhouse plants. Good references. Address X Y Z, care American Florist, Chicago.

SITUATION WANTED—By first-class gardener, private or commercial; the best of experience, as references will certify; married. Address
J. D., care Dr. Alfred E. Baker, West Chester, Pa.

SITUATION WANTED—By a competent florist and gardener; married; capable of growing flowers and early vegetables; 15 years' experience. Best of references. Address X, care Joseph Schmidt,
44 North 3rd St., Harrisburg, Pa.

SITUATION WANTED—By a practical florist, German, single, age 27, 11 years' experience, by 1st of September. Speaks five languages. Can give good references. Address A D,
care Paul Goebel, Hall St., Grand Rapids, Mich.

SITUATION WANTED—By practical gardener; 10 years' experience in growing bedding, stove and greenhouse plants, fruits and vegetables; also landscape work; married, no family. Best of references. Address, stating salary, etc., J D, Morgan Park Ill.

SITUATION WANTED—By 1st of September, by a practical florist; German, married, age 33; 19 years experience; thorough knowledge of roses, carnations, violets, palms, propagating, etc.; 6 years in one place. Best of reference from present employer. Address
FLORIST, box 114, Eminence, Ky.

SITUATION WANTED—By first-class gardener; Scotchman; over 26 years' experience; well up in the cultivation of flowers, fruits and vegetables, both under glass and outdoors. First-class testimonials and references. Married. Address A S,
care Jas. Shaw, Garrett Park, Montg. Co., Md.

SITUATION WANTED—By a first-class competent florist and gardener, German, married, no family; asks a good and steady place as foreman or head gardener, commercial place preferred. Thirty-four years experience, four years in this country with Messrs. Strauss & Co. and Mr. N. Studer, Washington; Mr. C. Eisele, Philadelphia, and now with Mr. T. T. Holton, Morristown, N. J. Address
T. A. KASEBOKA, Sussex Ave., Morristown, N. J.

WANTED—A young florist (German preferred); general greenhouse work; at once.
ED. KIRCHNER, Winona, Minn.

WANTED—A thoroughly practical man to take charge of a department. Address
ANCHORAGE ROSE CO., Anchorage, Ky.

WANTED—A first-class propagator of bedding plants, etc., by August 1, in a commercial business. Address N N, care American Florist.

WANTED—A young man to grow roses. Must be reliable, and bring good references. Address
Z, care Peck & Sutherland, 67 Bromfield St.,
Boston, Mass.

WANTED—A thoroughly competent man to take charge of my greenhouses. One who understands the growing and forcing of roses, carnations, violets and bulbs. Married man preferred.
MRS. GEO. R. FRAVELL, Marion, Ind.

FOR SALE—Hall steam pump and boiler—both new. $115.00 on cars here. Call or address
JAS. DAUGHERTY, box 17, Madison, N. J.

FOR SALE—Hitchings corrugated fire box boiler No. 15; heats 600 feet 4-inch pipe. Price $200.00. Address W. A. WETTLIN, Hornellsville, N. Y.

FOR SALE—New hotbed sash. Georgia Pine, unglazed, 3x7, primed, f. o. b. $1.00 each. Cash with order. DARLINGTON BROS., Morristown, Tenn.

FOR SALE—One Dederine boiler No. 5 and 225 feet of 4-inch pipe, in first-class condition. Price $75.00. Write for particulars. Address
ARTHUR ELLIOTT, Baraboo, Wis.

FOR SALE OR EXCHANGE—Two steam radiators, perfection, two years old; will sell for ½ price or exchange for hot water radiators. Address
J. S. WARNER, Medina, Ohio.

FOR SALE—The greenhouses, stock and good will of the well established florist business of the late T. C. Ingram. Terms reasonable. Address
ALFRED HAMLIN, 1011 St. Louis Ave.,
Kansas City, Mo.

FOR RENT—Three greenhouses, well stocked, one acre land and dwelling, in livest city in the south. Splendid chance for right party. Address
"SOUTH," care American Florist, Chicago.

FOR SALE—My retail florist business at 87 and 89 W. Madison street, Chicago. Completely stocked with supplies and plants. Good horses, wagon and every thing that a first-class store needs. 42 ft. frontage of large show glass. This is no run-down business but one of the best paying in this city. Cause for selling, too much other business. Apply to
T. J. CORBREY, 45 Lake St., Florists' Exchange.

FOR SALE CHEAP—Four second-hand boilers, with grate bars, front, etc., complete. 1 steam fire-box boiler, size 7½ ft. long, 3 ft. in diameter, 18 3-in. flues. Original cost $200; price $75. 1 saddle boiler, hot water, size 9 ft. long, diameter 34 inches, 23 3-in. flues. Original cost $200; price $75. 1 hot water, size 5 ft. long, 2 ft. in diameter, with 24 3-in. flues, (a great heater); price $60. 1 hot water size 5 ft. long, 26 inches in diameter, with 20 2½-inch flues; price $55. 5000 ft. 4-inch water pipe in 5, 10 and 15 ft. lengths, connected with red lead packing, at 7c. a foot. 50 4-inch elbows, at 15c. each. 50 4-inch tees, 15c. each. Above boilers heated over 20,000 square feet of glass (6 houses), with thermometer frequently 30 degrees below zero. Above prices f. o. b. at La Crosse. JOHN A. SALZER SEED CO.,
La Crosse, Wis.

RARE OPPORTUNITY.

Live business, known over four states as a successful place, elegantly located, live county seat, 21 acres, rich soil, 3 steam greenhouses, 8-room dwelling, large barn, other buildings; own gas well, no cost for fuel; own water works, choice fruits. Good reasons. Will trade for improved farm. Particulars cost nothing; write. **Barnes' Garden**, box 85, Independence, Kans.

FOR SALE OR RENT.

Rose and cut flower growing plant containing about 35,000 square feet of glass; houses heated by steam and hot water; all in good condition; well stocked with roses, ferns, palms, etc. Only 18 minutes ride from center of city. If you mean business, address
FLORIST, care Chas. E. Prather, Louisville, Ky.

FOR SALE.

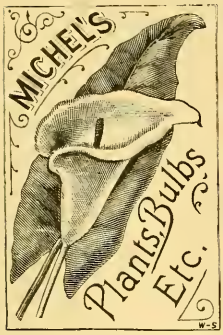
WEATHERED BOILER No. 5; 900 feet 4-inch pipe.
GLASS, 500 square feet, 16x24 double.
POTS, 8,000 2½-inch Standard, Whilldin make. 800 6-inch. Write for prices.
S. B. FIELD, Roselle, N. J.

FOR SALE—HALF COST.

Three greenhouses, 50x12 each, built in '88, on large lot in town, with 28 sashes, new; frames, tools, pots, large winter select stock of carnations, bouvardias, violets, chrysanthemums, asters, etc., etc.; heated with Meyers' new hot water boiler; good local trade in town of 4,000; new depot, 6½ miles from Phila.; 1 year established stand in largest market in Phila. Party has business in Scotland. $1,000—$400 down, rest on mortgage.
FLORIST, care Moore & Simon, 149 N. 4th St., Phila.

FOR SALE OR TO RENT.

The following greenhouse property, situated on the outskirts of Springfield, the City of Houses; or will sell Greenhouses, Stock and Fixtures and give ten years' lease of 2 acres land. Ten houses in all—5 houses, 10 feet wide, 65 feet long; 4 houses, 18 feet wide, 65 feet long; 1 house, 18 feet wide, 65 feet long. Steam plant! New double Florida Boiler. Stock in good condition, with a large and extra good home market. This is an opportunity in a life-time, as present owner has other interests to look after. If you are looking for a chance, apply at once to
N. D. WINTER.
5 Elm Street, SPRINGFIELD, MASS.



Write for Wholesale List.

MICHEL PLANT AND BULB CO., ST. LOUIS, MO.

Freesia refr. alba.

READY NOW. Samples mailed free.

	Per 100	Per 1000
SELECT BULBS	$ .75	$5.00
EXTRA SELECT BULBS	1.00	8.50

W. W. BARNARD & CO.,
6 and 8 North Clark Street, CHICAGO.

We make special import prices on

ROMANS, LILIUM HARRISII, NARCISSUS, HYACINTHS, TULIPS, VALLEY PIPS, and all other FORCING BULBS. . . . . .

Let us know your wants and get our prices.

ONION SEED

OUR SPECIALTY.

Grown from selected Onions and the purest stock in the United States.

1893 CROP 1893

Yellow Globe Danvers, Yellow Flat Danvers, Extra Early Red, Wethersfield. } Write for Prices.

COX SEED AND PLANT CO.
SAN FRANCISCO, CAL.

J. J. MOSER,

Versailles Nurseries,
VERSAILLES, - FRANCE.
Cable Address: MOSER, VERSAILLES, FRANCE.

SPECIALTIES.

Hardy Rhododendrons, Azaleas, Kalmias, Palms, Fruit Trees, Rose Trees, Japanese Maples, Ornamental Trees, Orchids, Perennials.
Grand Choice of Extra Large Conifers.
Catalogues sent on Application.

A. MOSER, Agt.,
2223 Cottage Grove Ave., CHICAGO, ILL.

TRY DREER'S GARDEN SEEDS, Plants, Bulbs & Requisites. They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.
HENRY A. DREER, Philadelphia, Pa.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

BULBS. BULBS.

Fall '93 Importations. **We guarantee sound delivery.**

WE SHIP FOR

JULY—Freesias and Calochortus, Brodiæas, Fritillarias, etc.
AUGUST and SEPTEMBER—Callas, Longiflorums, Australian Tree Fern Stems and Australian Palm Seeds, Chinese Narcissus.
OCTOBER to APRIL—Auratums, Albums, Rubrums, and all other Japanese Bulbs. Deciduous and other stock. Cycads, Zamias, etc.

☞ Send for our New Trade List giving full descriptions, etc. We can give you prices NET to points of destination that you will know to a penny what goods will cost you delivered. Remember we GUARANTEE SAFE DELIVERY—accidents to carriers excepted.

Callas, Callas, Callas, and Freesias.

We control a large stock of these, and will, if ORDERED EARLY, give extra favorable rates.

FROM JAPAN DIRECT.

We can ship you Bulbs from Japan direct, either via San Francisco, or via Suez; but we cannot assume any risk on these shipments. Our prices and terms we can make you, however, are more favorable than any other firm in the trade. ☞ Full particulars and information on application. . . . .

SEND EARLY ORDERS.

Auratums threaten to be scarce again, especially larger sizes.

H. H. BERGER & CO., SAN FRANCISCO, CAL.

GT. VAN WAVEREN & KRUYFF,

GROWERS OF

Hyacinths, Tulips, Crocus, Daffodils,

LILIES, ETC., ETC.

SASSENHEIM, Haarlem, HOLLAND.

ESTABLISHED 1866.

Choice Dutch Bulbs

AND NEW VARIETIES OF ATTRACTIVE BULBOUS PLANTS, GROWN BY

C. G. VAN TUBERGEN, JR.,
Haarlem, Holland.

For Fall importation, catalogues free on application to his sole agents
C. C. ABEL & CO., P. O. Box 920, New York.

We Sell Bulbs!

Special Prices on Application.

Weeber & Don
Seed Merchants and Growers,
114 Chambers St., NEW YORK.

Lily of the Valley Bulbs.

THE STAR BRAND
SPECIALLY RECOMMENDED FOR LATE FORCING.

We are now booking import orders for shipment from Hamburg in October or November.

REISS & BRADY,
280 Washington Street, New York.

G. J. MOFFATT,

Manufacturer of

PAPER BAGS AND ENVELOPES

Special attention given to
Seed Bags and Catalogue Envelopes.
NEW HAVEN, CONN.

Columbia Farm,

ST. GEORGES, BERMUDA.

The undersigned solicits offers for about 100 lbs. Freesia Seed (R. alba), for the whole, or in lots of 10 lbs. Also a few early white Roman Hyacinths, Gladiolus, Calla, Chinese Sacred Lily, Amaryllis Johnsonii bulbs and Canna roots; choice varieties. June and July delivery.

R. H. JAMES,
Grower and Exporter of Bermuda Bulbs.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser.

HULSEBOSCH BROS.,

BULB AND PLANT GROWERS,

OVERVEEN, near Haarlem, HOLLAND.

	Per 100	1000
Lilium Harrisii, 4 to 5-inch in circ.	$2.20	$19.00
" " 5 to 7-inch in circ.	3.00	24.00
" " 7 to 9-inch in circ	5.25	47.00
" " 9 to 12-inch in circ.	11.00	100.00
Lilium Longiflorum 10 per cent dearer than Lilium Harrisii.		
Roman Hyacinths, extra selected	2.50	22.00
" " top roots	3.00	25.00
Narcis. Totus Albus, extra selected	1.00	7.50
" " " Grandiflorum, ext s'le'd	1.30	11.00

Fall Wholesale Catalogue now ready. Address

A. HULSEBOSCH,
P. O. Box 3118. Warehouse 58 West Street, NEW YORK CITY.

Helianthus Maximillianus

This noble perennial herbaceous Sunflower grows to the height of ten (10) feet in good rich soil, and blooms in the Fall, throwing grand spikes of its beautiful single flowers.

Strong plants, $1 per doz.; $6 per 100.

EDWIN LONSDALE,
WYNDMOOR, near Chestnut Hill, PHILADELPHIA.

Vaughan's Solid Steel Trowel.

THE BEST IN THE WORLD. NEVER WEARS OUT.

Price, 50c.; by mail, 60c.

VAUGHAN'S SEED STORE,
NEW YORK, 26 Barclay Street. CHICAGO, P. O. Box 688.

LILIUM HARRISII.

Original and largest growers of this important bulb.

OUR SPECIALTY!

True Stock. Lowest Prices. Best Quality.

F. R. PIERSON CO.,
TARRYTOWN-ON-HUDSON, NEW YORK.

Choice Lily of the Valley Pips.

Ernst Reimschneider, Altona, Hamburg.

For Fall importation. Catalogues free on application to his sole agents,

C. C. ABEL & CO., P. O. Box 920, New York.
Mention American Florist.

Toronto.

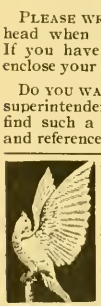
There is no trade worth reporting on now, and florists—like the other professions—after the rushing and profitable season just past, are all taking their well earned holidays at the seaside or in Europe. It is reported that the leading city rosierists, having made so much money last Christmas and Easter, will return, after doing London, Paris, Berlin, Vienna, etc., via Suez Canal, Calcutta, Hong Kong and San Francisco, arriving in time to take in the convention and the Horticultural Congress. It was not intended that this should be made public because the said rosierists did not wish the retailers to know that they had been making any money, but as I wish to befriend the retailers I give it away so that they may act accordingly next season and be able to take the trip themselves the following summer holidays.

The day after writing my last notes a notice appeared in the papers to the effect that the fare to Chicago and back would be reduced to $12.45, and the day after this report was contradicted. It now appears that the C. P. R. and the G. T. R. are trying to arrive at some agreement on the question, and that the only hitch is whether the reduction shall apply to all trains or only to special excursions. It is probable that something will be done in a few days though. Many people are only waiting for the reduction before going to the Fair.

The summer flower show (19th and 20th inst.) is the principal topic of conversation in the trade just now. The regular meeting of the G. and F. Association, which in the ordinary course of events would have occurred on the 18th, has been "anti-poned" to the 11th in order to accommodate intending exhibitors. There will be a good show in spite of so many plants having gone to the Fair. I have not heard who the judges are this year, but presume the great and only original Scott of Buffalo will be one and the genial F. G. Foster of Hamilton the other. E.

PLEASE WRITE on your printed letter head when addressing our advertisers. If you have no printed letter head, then enclose your business card or bill head.

DO YOU WANT a list of the leading park superintendents of America? You will find such a list in our trade directory and reference book.



WHITE DOVES

FOR FLORISTS.

Largest and finest stock in the United States. Write for prices to

S. J. RUSSELL,

850 Montgomery St., Jersey City, N. J.

FOR SALE BY Messrs. F. E. McAllister, Ed Janson, A. Herrmann, N. Steffens and Reed & Keller, New York; W. C. Krick, Brooklyn, N. Y.; H. Bayersdorfer & Co., Ernst Knufmann and Marschuetz & Co., Philadelphia, Pa.; C. Ribsam & Sons, Trenton, N. J.; J. M. McCullough's Sons and B. P. Critchell & Co., Cincinnati, O.; J. C. Vaughan, Chicago, Ill.; Wisconsin Flower Exchange and Currie Bros., Milwaukee, Wis.; C. A. Kuehn, S. Mount & Co., C. Young & Sons Co., Wm. Ellison and Jordan Floral Co., St. Louis, Mo.; C. Strauss & Co. and Ed. S. Schmid, Washington, D. C.; G. W. Currey & Co. and Ecklardt & Co., Nashville, Tenn.; T. W. Wood & Sons, Richmond, Va.; U. J. Virgin, New Orleans, La.; D. B. Long, Buffalo, N. Y.; J. A. Simmers, Toronto, Ont.

Celery Plants.

2,000,000 WHITE PLUME, $1.25 per 1,000. Cash with order. Samples mailed free upon application.

C. M. GROSSMAN, Wolcottville, Ind.

Carnations All Sold

We still have some Fine Plants of

The Best Yellow Canna, NELLIE BOWDEN, 75c each. $8.00 per dozen

JOHN McGOWAN, - - Orange, N. J.

You Must be Thinking

Now about the pot-grown Strawberry Plants you will need for your trade this summer. We will have them in leading varieties after July 1, at $18.00 per 1000. $15.00 in large orders. We can ship at once. NO WAITING.

Rogers' Nurseries, Oldest in the State Moorestown, N. J.

The Summer Tours

of the MICHIGAN CENTRAL, "The Niagara Falls Route," are unrivalled in their variety, picturesqueness and comfort, embracing the best routes to Petoskey, Mackinac Island and Michigan Resorts, Niagara Falls, Thousand Islands and the St. Lawrence River, the Adirondacks, Green and White Mountains, Canadian Lakes and the New England Sea Coast.

A copy will be sent upon application to

MR. L. D. HEUSNER,
City Pass'r and Ticket Agent,
NO. 67 CLARK STREET, CHICAGO.

This is "THE FLORISTS LINE" to the World's Fair.

THE WABASH

. . . WILL BE THE . . .

"FLORISTS LINE"

TO THE ST. LOUIS

CONVENTION, as well as returning.

Write F. A. PALMER, Gen'l Pass. Agt., 201 Clark Street, CHICAGO.

It is expected a party will be made up leaving Chicago about August 7.

Association "Flora"

BOSKOOP, HOLLAND

NURSERIES.

Roses, Clematis, Shrubs, Azaleas, Palms, Herbaceous Plants, Bulbs, Etc.

Catalogue on Application.

P. OUWERKERK,
206 Cambridge Ave., JERSEY CITY, N. J.

PYRETHRUM ULIGINOSUM. (Hardy.) The Daisy that blooms in the Fall. Plants in 2-inch pots, $5.00 per 100.

CHRYSANTHEMUMS.

All the leading kinds for cut flowers; in thumb pots, $3.00 per 100; $25.00 per 1000. My selection.

EDWIN LONSDALE,

WYNDMOOR Station: Chestnut Hill P. O., PHILA.
on Phila. & Reading R. R. from 12th & Market Sts.

CHOICE SWEET PEAS

Being the largest growers of the above in the world the trade are invited to send a list of their requirements and secure low prices for Fall delivery.

SHERWOOD HALL NURSERY CO.
Menlo Park and San Francisco, Cal.

CARNATIONS

Rooted Cuttings all sold or planted out.

FIELD GROWN PLANTS IN SEASON.

Correspondence Solicited.

C J. PENNOCK, THE PINES,
Chester Co., KENNETT SQUARE, PA.

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

FIELD GROWN CARNATIONS.

Fine healthy plants for Winter Bloom.

W. R. SHELMIRE,
CHESTER CO., AVONDALE, PA.
Send for Circular.

CARNATIONS.

A SPECIALTY.

Full stock of all the new and leading varieties. Rooted Cuttings, Young Plants, and Field Grown Plants in season. Get our prices before purchasing.

GEO. HANCOCK,
GRAND HAVEN, MICH

GERANIUMS.

Assorted varieties, named, from 5 and 6-inch pots, 10 cts. each; $8.00 per 100.

SCOTCH PINKS (Hardy). Large clumps from open ground, $1.20 per doz.; $10.00 per 100.

100 CALLAS, 5 and 6 years old, 10c. each.

— CASH WITH ORDER. —

S. B FIELD, ROSELLE, N. J.

E. G. HILL & CO.,

Wholesale Florists

RICHMOND, INDIANA.

HEADQUARTERS for WATER LILIES

Now is the time to plant all tender and tropical varieties without risk and loss. Secure your stock early. Prices moderate. Send for Catalogue.

WM. TRICKER, DONGAN HILLS, NEW YORK.

Asparagus Plumosus Nanus,

from 4-inch pots, fine stock.

Per hundred ..... $ 32.50
Per thousand 300.00

50 at 100 rate, 250 at 1000 rate.

1000 SMILAX to spare, from 2½-inch pots, at $2.00 per 100; $18.00 per 1000.

THEO. BOCK,
Miami Street, HAMILTON, OHIO.

Chrysanthemums.

Best for florists' use. New of 1892.

HARRY BALSLEY,
EDWARD HATCH,
GEO. W. CHILDS,
MRS. ROBT. CRAIG,
MR. HICKS ARNOLD,
JOHN H. TAYLOR,
ROSLYN,
} Per 100, $5 00.

100 plants, 10 to 20 choice standard varieties, our selection, $3.00.

100 plants, best of '92 and standard sorts in equal quantity, our selection, $4.00.

Miss Kate Brown, new early white, per 100 $5.00.

NIVEUS.

The grand prize winner of the year, per dozen $4.00; per 100 $25 00.

Prices of other new varieties on application.

Address **NATHAN SMITH & SON,**
167 W. Maumee St.,
ADRIAN, MICH.

CHRYSANTHEMUMS.

2½ inch, $4 per 100.

SMILAX—1st class, from 2½ inch pots, $2.50 per 100; $20.00 per 1,000. Samples free.

Address **J. G. Burrow,**
FISHKILL, N. Y.

Swainsona galegifolia alba.

Nice young plants in 2¼in. pots, $3.00 per dozen. **STOCK LIMITED.**

EDWIN LONSDALE,
WYNDMOOR, near Chestnut Hill, **PHILADELPHIA.**
Money Order Office, Station "G," Phila.

SMILAX PLANTS CHEAP.

For the month of July only.

In order to make room I offer extra fine strong **SMILAX PLANTS**, out of 2-inch pots, for **$12 50** per 1000. (500 at 1000 rate); **$1.50** per 100. **Terms strictly Cash.** Plants will be packed light, and satisfaction guaranteed. Samples will be sent on receipt of 10c. stamps.

FRED SCHNEIDER, Wholesale Florist,
Wyoming County, ATTICA, N. Y.

SMILAX.

A large stock of strong well grown plants from 2¼-inch pots, at **$2.00** per 100; **$18.00** per 1000.

PANSY PLANTS for fall. Choicest strains.

CYCLAMENS, both 1 and 2 year bulbs. Prices on application.

CLEMATIS, large flowering, for fall delivery. A very large stock and assortment. Write for prices. I can suit you both on plants and prices.

F. A. BALLER, Bloomington, Ill.

SMILAX.

Strong plants, from 2¼-inch pots, $2 00 per 100; $18.00 per 1000.

HEITE FLORAL CO.,
712 Linwood Ave., KANSAS CITY, MO.

Surplus Celery Plants

at $1.00 per thousand. Grown by the largest grower in America.

200,000 WHITE PLUME,
200,000 HARTWELL Perfection,
200,000 GIANT GOLDEN HEART,
200,000 GIANT PASCAL.
} Now Ready.

JOSEPH DUNKLEY,
622 Pearl Street, Kalamazoo, Mich.

Always mention the American Florist when writing to advertisers.

PLANTS OF

Asparagus plumosus

STRONG 3-YEAR OLD ROOTS.

Just the kind for making strings in a hurry. Large enough to divide up and still have big plants.

$10.00 PER DOZEN; $75.00 PER HUNDRED.

JOHN BURTON, Chestnut Hill, Philadelphia.

PANSIES.

THE BEST ARE THE CHEAPEST.

SIZE is a strong point in Pansies; when you combine size, color, substance and form they are pretty near right. By careful hybridization and selection I have accomplished this, and the Pansies I send out this Fall will be an agreeable surprise, even to former customers. If you buy Pansies I would be pleased to correspond with you; they will be offered for sale from Aug. 20th to Dec. 1st, at 75c. per 100 or $5 per 1000. Terms cash with order or C. O. D. No seed for sale.

L. B. 496. **ALBERT M. HERR, LANCASTER, PA.**

ZIRNGIEBEL'S Giant Market and Giant Fancy PANSIES,

are without question the most popular strains in cultivation up to date.

New Seed ready now, in trade packages of either strain, at one dollar each.

Denys Zirngiebel,
NEEDHAM, MASS.

PANSY SEED. PANSY

The Jennings strain of large flowering and Fancy Pansies, new crop now ready, 8 pounds of seed and over 500,000 plants were sold last season. This strain is popular, and why? Because Florists can depend on getting only First Class Stock. I shall sell no other. My aim is to supply the best Finest Mixed, all colors, trade pkt. 300 seeds 25c.; 1000 seeds 50c.; 20.0 seeds $1.00; per ounce $6.00. Pure White (the finest) trade pkt 50c. and $1.00; Golden Yellow, dark eye, trade pkt. 50c. and $1.00. Send for price list for other varieties. Pansy Plants, ready September 1 to December 25, any size wanted, cold frame size 65c. per 100 by mail; $5.00 per 1000 by express; 5,000 $20. Large flowering plants $1.00 per 100; $8.00 per 1000. Cash with order.

ADDRESS **E. B. JENNINGS,**
WHOLESALE PANSY GROWER,
Lock box 254 **SOUTHPORT, CONN.**

ROEMER'S SUPERB PRIZE PANSIES

The finest strain of Pansies in the World.

Introducer and Grower of all the leading Novelties.

Catalogue free on application.

FRED. ROEMER, SEED GROWER,
QUEDLINBURG, GERMANY.

Phœnix rupicola.

This useful and beautiful Date Palm in **EXTRA FINE PLANTS**, growing in from 7 to 10-inch pots, from $3.50 to $7.50 each, according to size.

EDWIN LONSDALE, Wyndmoor,
STATION "G," PHILADELPHIA.
(Chestnut Hill P. O.)

SEND FOR A COPY
— OF OUR —
TRADE DIRECTORY

AMERICAN FLORIST CO., CHICAGO

The Best Strain of PANSIES

Is what everybody wants and will find in the **DIAMOND STRAIN**. Thousands of amateurs and florists whom I annually supply with this strain say it is the best. Its large and perfectly formed blooms, with thick and velvety petals of an endless variety of rich and delicate colors and tints, often in combinations, that if not seen would be difficult to believe ever existed in a pansy, distinguishes this strain above all others. I particularly invite a trial order from florists who have never dealt with me, feeling confident that a trial and comparison with other strains will result in further trade to our mutual advantage.

PRICES: All varieties mixed, over 50 distinct sorts and an endless variety, per ½ oz. $1.00; per ¼ oz. $1.75; per ½ oz. $3.50; per oz. $6.00.

TERMS: CASH WITH ORDER.

MONEY ORDER OFFICE, AMHERST, MASS.

Address **L. W. Goodell,**
PANSY PARK, DWIGHT, MASS.

PANSIES.

During the season we shall have plants of best German strain of Pansies, at lowest prices.

BRAUER & RICHTER,
McCONNELSVILLE, OHIO.

EXTRA PANSY SEED.

Mammoth Sunbeam Strain.

A grand collection of giant flowering varieties, very large, of perfect form, and choice colors; carefully selected; receive high praise from my customers; better than ever; no finer strain offered anywhere. Every florist should sow of it. Trade pkt., 500 seeds, 25 cts.; 3 pkts. 60 cts.; 6 pkts. $1.00.

JOHN F. RUPP, Shiremanstown, Pa.

C. STOLDT,

CYCLAMEN GROWER,
WANDSBEK-MARIENTHAL, near Hamburg, GERMANY,

Offers **CYCLAMEN SEED, SHOLDT'S HYBRIDS.** First-class seed, are acknowledged to be unsurpassed by all authorities in Europe, at the following prices, including postage:

Bright dark red.....	per 100 corms.	50 cts.
Rose or Marienthal.....	" "	50 cts.
Katchen Stoldt, pure white	" "	75 cts.
White, with carmine eye..	" "	35 cts.

CASH WITH ORDERS.

THE GREAT ANTIPEST.

For particulars, see next week.

R. W. CARMAN, GEN'L AGT.,
291 Amity Street, FLUSHING, Queens Co., N. Y.

Society of Indiana Florists.

The society met in Fairview Park, near Indianapolis, July 3, at 2 p. m. The attendance was satisfactory. Mr. Dorner read his annual address, which was full of good points and recommendations. The reports of the secretary and treasurer and auditing committee were read and approved. Special thanks were voted the secretary and ladies of the flower booths connected with the sixth chrysanthemum show. Excellent progress was reported for the coming seventh annual floral festival in November. Several recommendations were filed for the committees' guidance. The premium committee was empowered to select all sub-committees. A proposition from the Indiana Horticultural Society in regard to holding a joint floral and fruit show was accepted. Several changes in the by-laws were ordered.

The following resolutions were passed: "It is with sincere grief that we have learned of the death of the honored treasurer of this society, Mr. F. C. Huntington, and in testimony of our esteem and respect for our deceased brother, it is hereby ordered that an expression of our loss be entered on the minutes of this society, and a copy of this resolution be tendered the bereaved family."

Mr. E. G. Gillett, secretary of the Cincinnati Florists' Club, was present on invitation and read a very interesting and timely paper on "The cut flower trade and the wants for the coming season." The paper created a lively discussion and a vote of thanks was tendered the gentleman.

The following committee was appointed to work in conjunction with the Indianapolis Florists' Club committee to make arrangements for the American Carnation Society meeting: Messrs. Dorner, Hill and Hunt.

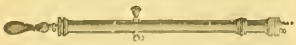
Officers for the coming year were elected as follows: M. A. Hunt, Terre Haute, president; J. S. Stuart, Anderson, vice-president; Wm. G. Berterman, Indianapolis, secretary; John Hartje, Indianapolis, assistant secretary; J. T. Huntington, Indianapolis, treasurer; executive committee—Henry Rieman, Indianapolis; W. W. Coles, Kokomo; Anthony Wiegand, Indianapolis.

The meeting was held under a tent in the shady part of Fairview Park, the use of the tent being kindly donated by our celebrated chrysanthemum show decorator, Mr. J. E. Truemper. About 6 p. m. the ladies unpacked an elegant lunch and everyone enjoyed the same in the cool air. A bowling match on a small scale was one of the features after supper.

The next annual meeting of the society will be held in January.

Kills Mildew and Fungus Growth. What does? GRAPE DUST. Sold by Seedsmen.

STOTT'S SYRINGE.



Read advertisement in next week's issue

HOW TO GROW CUT FLOWERS.

A PRACTICAL TREATISE ON

THE CULTIVATION OF THE ROSE,

And Other Flowering Plants for Cut Flowers, sent to any address upon receipt of $2.00. M. A. HUNT, Terre Haute, Ind.

IMPORTED ORCHIDS.

Cattleya Mossiæ just arrived in splendid condition. East Indian Orchids have arrived. Among them will be a grand lot of Vanda Cœrulea, Cypripedium Insigne, collected in the original district from which all the choicest varieties have come, Cymbidium Eburneum, C. Mastersii, C. Devonianum, C. Giganteum. Also Dendrobium Nobile, D. Farmersii, D. Chrysoloxum, D. Thyrsiflorum, D. Aureum, D. Densiflorum, D. Devonianum, D. Cambridgeanum and other Dendrobes, together with a small lot of Phajus Wallichii and Pleiones. Prices of the above on application.

Of Established Orchids a fine selected stock of Cattleya Trianæ, well established in 6-inch pots and will produce four to eight flowers each next winter. Many very choice varieties will be found among them. Single plants $2.50; 12 for $25.00; 100 for $175.00. Terms sixty days to buyers with satisfactory references, or 5 per cent discount for cash.

IG. FORSTERMAN, NEWTOWN, N. Y.

Siebrecht & Wadley,

ROSE HILL NURSERIES,

NEW ROCHELLE, N. Y.

Palms, ORCHIDS Roses, and New Plants.

FRESH DRACAENA CANES NOW READY.

ORCHIDS.

The Finest Stock in the World.

SANDER'S, ST. ALBANS, ENGLAND.

Thirty minutes from London.

Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City.

Orchids Cheap as Good Roses.

BRACKENRIDGE & CO.,

Estlabished 1854. Govanstown, Md.

PRICE LIST FREE.

1,000,000 CANE STAKES

CUTS!

Wood Engraving, Zinc Etching, Half-Tone, Wax Engraving, Photo-Engraving, Designing.

MANZ & CO., ENGRAVERS.

183 Monroe Street, CHICAGO.

CATALOGUE PRINTING. ELECTROTYPING.

Done with expert ability for Florists, Nurserymen, Seedsmen. Write to

J. Horace McFarland Co., HARRISBURG, PA.

Cape Flowers, new crop in best white quality at $1.00 the lb.; 10 lb. lots, $9 net.

Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 28-in. upwards, at 40c., 45c., 50c., 60c., 75c. and $1.00 each, according to length.

Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.

Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.

Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc. For prices consult our

Trade Catalogue, mailed free.

August Rölker & Sons,

136 & 138 W. 24th St., P. O. Station E. New York.

H. BAYERSDORFER & CO.,

WHOLESALE

FLORISTS' SUPPLIES ONLY,

66 N. 4th Street, PHILADELPHIA, PA.

Our new Catalogue is now out, free upon application.

MARSCHUETZ & CO.,

Florists' Supplies,

23 & 25 N. 4th St., PHILADELPHIA, PA.

Send for Catalogue.

ERNST KAUFMANN & CO.,

Florists' Supplies,

113 NORTH 4TH STREET, PHILADELPHIA, PA.

WATER HYACINTHS,

$1.00 a dozen; $3.00 a hundred.

WATER POPPIES, 75 cts. a dozen.

MRS. A. E. DAVIDSON, Terry, Hinds Co., Miss.

GLADIOLI. Visit Floral Park next month and see our GLADIOLI.

95 ACRES 95

Of GLADIOLI in growth and bloom. The largest and finest stock in the world. Special prices now made for Fall and Winter delivery.

			PER 1000
FINE MIXTURES,		**First size and first quality,**	**$7.00**
do	**do**	**Second size " **	**5.00**
do	**do**	**First size and second quality**	**5.00**
do	**do**	**Second size " **	**4.00**
LEMOINEI, fine mixed			**15.00**
			PER 100
CHILDSII, fine mixed			**20.00**
SNOW WHITE			**10.00**

A magnificent collection of fine Named Varieties (400 kinds), at special low rates. Correspondence solicited. Price List issued in October.

JOHN LEWIS CHILDS, Floral Park, L. I., N. Y.

TO TAKE PLACE OF WIND MILLS

HOT AIR PUMPING ENGINES

A Windmill Is unreliable because it depends upon the elements for its power; hydraulic rams also depend upon favorable conditions and waste as much water as they secure. Steam pumps require skill and hand pumps demand labor and time. The

DE LAMATER-RIDER OR DE LAMATER-ERICSSON Hot-Air Pumping Engines are especially designed for pumping water, and from shallow streams or any kind of well. They are simple, safe and reliable, require no steam and have no valves. They require very little heat to operate them, and can be arranged for any kind of fuel.

Send for illustrated catalogue to

THE DE LAMATER IRON WORKS, 87 South Fifth Av., NEW YORK, N. Y.

TRADE MARKS. COPYRIGHTS.

SOLICITOR OF U. S. AND FOREIGN PATENTS, Atlantic Building, Washington, D. C. (Send sketch or model for free examination as to patentability.)

FLORAL DESIGNS The Cut Flower Worker's Friend. Fine book of 160 pages. Send **$3.50** for it, to J. HORACE McFARLAND, Harrisburg, Pa.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

H. M. HOOKER COMPANY,

57 and 59 W. Randolph Street, CHICAGO,

NATURAL GAS MADE GLASS

FOR GREENHOUSES.

Write for latest prices.

FRENCH GLASS For CONSERVATORIES, ROSE HOUSES, Etc. Etc.

VANHORNE, GRIFFEN & CO.,

Importers of PLATE and WINDOW GLASS. Manufacturers of BENT GLASS and FRENCH MIRRORS.

131-133-135-137 FRANKLIN STREET, NEW YORK.

Note—Imported Glass is used in the best grade of Greenhouse building.

ESTABLISHED 1866.

FLORISTS WIRE DESIGNS

MANUFACTURED BY

N. STEFFENS

335 EAST 21ST ST. NEW YORK.

Send for a Copy OF OUR

TRADE DIRECTORY

AND REFERENCE BOOK. PRICE $2.00.

AMERICAN FLORIST CO., P. O. Drawer 164. CHICAGO, ILL.

OUR

Sash Lifter AND Hinges

will do the work and cost you less than any other. Send your name and address and we will mail you description and price.

BAY STATE HARDWARE CO. 272 Freeport Street, BOSTON, MASS.

Indianapolis.

The regular monthly meeting of the Indianapolis Florists' Club was held July 5th. The committee on entertaining the State Society at its meeting made a very favorable report. Two members were added to that committee to arrange for the annual picnic to be held soon. The flower beds laying empty in one of the parks brought up a lively discussion. The city authorities failing to appropriate money for that purpose, the Women's Relief Corps of the G. A. R. will, with the assistance of the florists, fill part of the beds. The constitution and by-laws were distributed among the members. Further discussion about the meeting of the Carnation Society was had and the indications are that all are greatly interested in the event. Wm. G. Bertermann, as member of the decoration committee of the G. A. R. convention, reported that he was requested to ask if florists were willing to sell surplus stock of plants at reduced prices if an effort should be made by the committee to induce liberal minded citizens to plant flower beds along the sidewalk grass plots. He was instructed to state that the market prices were at present very low on bedding plants and that all interested would be fairly treated.

A movement is on foot to start a bowling club for the summer.

The weather is very warm, for a few days most unbearable; trade is consequently at a standstill.

So far no sign of any improvements to be made this summer among the trade.

Mr. J. Forrest, of Troxell & Forrest, Knightstown, this state, has bought out Wm. A. Rouyer, Greenfield. The partnership has been dissolved.

Mr. Anthony Wiegand and family have gone to the World's Fair.

EVANS' IMPROVED
CHALLENGE VENTILATING APPARATUS
Write for Illustrated Catalogue.
QUAKER CITY MACHINE WORKS, Richmond, Ind.
Mention American Florist.

FLORISTS' HOSE,
Made by E. W. Holt, member of the Society of American Florists.
Goodyear Rubber Store,
2 W. 14TH ST. NEW YORK.

Lawn Vases.
THE LARGEST IN THE MARKET FOR THE MONEY.
17x29-inch .....price $1.00.
13x34-inch, with base, price $1.75.
20x22 inch .....price $1.50.
20x22-inch, with base, price $2.25.
Send for our price list of Standard Flower Pots, Plain and Fancy Vases, etc., etc. Terms cash f. o. b.
HILFINGER BROS. POTTERY, Ft. Edward, N. Y.

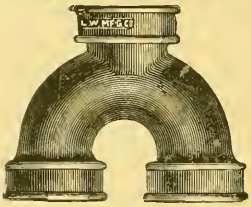
IMPROVED GLAZING.
Zinc Joints for butting glass without laps. No leakage. No sliding of glass. Practically air tight. Keeps out cold winds, thereby saving fuel. No laps, saves enough glass to pay for the zincs. No breakage of glass on account of frost or ice. Some of the largest growers in the country are using "Gasser's Patent Zinc Joints" with entire satisfaction. Write for sample and price list.
J. M. GASSER, FLORIST,
101 Euclid Ave., CLEVELAND, O.

D. H. ROBERTS,
159 & 161 South Fifth Ave., New York.
NATURAL GAS MADE GLASS,
for Rose Houses, Conservatories, etc., etc.
Look at our World's Fair Exhibit in Horticultural Building.

Mention American Florist.

THE "LOCKLAND" Sash Bars
ARE ALWAYS SATISFACTORY.
This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.
GUTTER MATERIAL, RIDGES, SASH, ETC.
The finest CLEAR CYPRESS used.
Write for circulars and estimates.
LOCKLAND LUMBER CO.
Lockland, O.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.
Pipe can be easily put together by any one, very little instruction being needed.
GET THE BEST!
Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.
Mention American Florist.
L. WOLFF MFG. CO., 93 to 117 W. Lake Street, CHICAGO.
WRITE FOR ILLUSTRATED CIRCULAR.

"Standard" Flower Pots.
As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address
The Whilldin Pottery Company,
BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

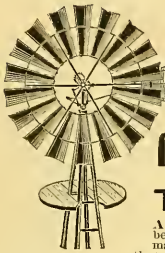
STANDARD FLOWER POTS.
Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.
A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.
We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.
SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

Always mention the American Florist when writing to advertisers.

PLEASE mention the AMERICAN FLORIST every time you write to an advertiser in these columns.

The FAIRBANKS GALVANIZED STEEL Wind MILLS AND TOWERS



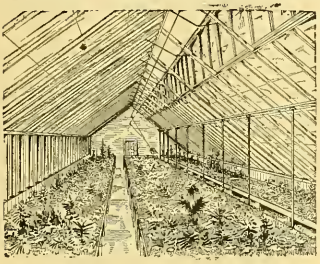
Are WARRANTED to be as well made, of as good material, and to produce more power than any other steel mill made.

THE ECLIPSE WIND MILL
the Original Self-regulating Wood Wheel.

Pumps, Tanks, &c. Send for Catalogue and Prices.

Fairbanks, Morse & Co., Chicago, Ill.

THE CHAMPION



Automatic Ventilator.

The cheapest, easiest to operate, and by far the best machine in the market. Don't pay a Ventilator until you have seen my illustrated descriptive circular, which will be sent you free, giving prices, etc. Also Champion Soil Pulverizer and Sifter.

Address, **E. E. WOLF,**
Box 114. SPRINGFIELD, O.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

Clear Cypress,
from bottom gutter up is my specialty.

Lyman Felheim,
ERIE, PA.

THE PERFECT DRAINAGE

BENCH TILE

For circulars, etc., address

W. P. Wight, Upland Green Houses,
Send your business card. MADISON, N. J.

STANDARD VENTILATING MACHINERY,

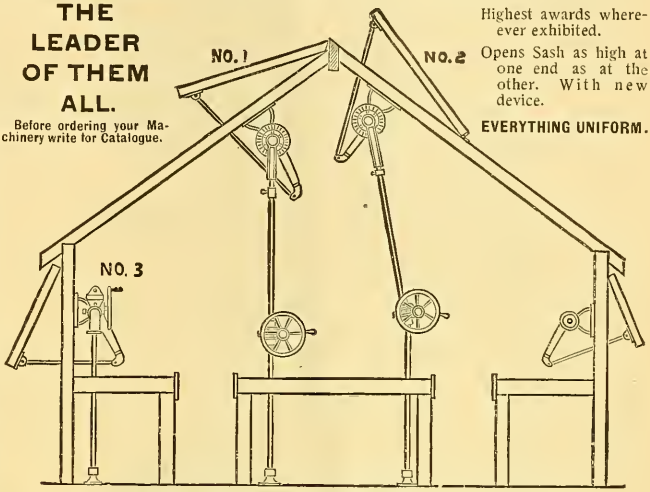
THE LEADER OF THEM ALL.

Before ordering your Machinery write for Catalogue.

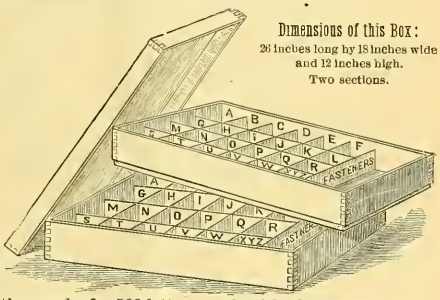
Highest awards wherever exhibited.

Opens Sash as high at one end as at the other. With new device.

EVERYTHING UNIFORM.



E. HIPPARD, YOUNGSTOWN, OHIO.



Dimensions of this Box:
26 inches long by 18 inches wide and 12 inches high.
Two sections.

With an order for 500 letters, we furnish a box made of wood nicely stained and varnished, such as is represented in the cut.

BOSTON FLORIST LETTER CO.

Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1½-in. and 2-in. 2.00 per 100. Patent fastener with each letter.

OUR NEW SCRIPT LETTER, $4.00 per 100.

N. F. McCARTHY, Treas. & Mangr. | Address 13 Green St., **Boston, Mass.**

Address all correspondence to 1 Music Hall Place.

We have a new FASTENER which we consider a decided success. Any customers having old style fasteners which they wish to exchange, can do so without additional cost by writing us.

These Letters are handled by all the Wholesalers in Boston.

AGENTS:
Marschnetz & Co., 25 N. 4th St., Phila., Pa.
A. Rolker & Sons, New York.
F. E. McAllister, 22 Dey St., New York.
A. D. Perry & Co., 33 Warren St., Syracuse, New York.
Ernst Kaufmann & Co., 113 N. 4th St., Phila.
H. Bayersdorfer & Co., Philadelphia, Pa.
A. C. Kendal, 115 Ontario St., Cleveland, O.
J. A. Simmers, Toronto, Ont. Agent for Canada.
E. H. Hunt, 79 Lake St., Chicago, Ill.
Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.
H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O.
T. W. Wood & Sons, 6th and Marshall Sts. Richmond, Va.
Jas. Vick's Sons, Rochester, N. Y.
C. A. Kuehn, 1122 Pine St., St. Louis, Mo.
D. B. Long, Buffalo, New York.
C. F. Huntington, Indianapolis, Ind.

J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS •
Greenhouse Material,

LOUISVILLE, KY.

Mention American Florist.

STANDARD HOSE MENDER.

The only Mender using ordinary galvanized wire No. 14, instead of expensive bands. Any person can handle it with perfect ease. Thousands in use and all testify to its Wonderful Merits.

Sample Box, by Mail, 50 cts.

E. HIPPARD, Youngstown, Ohio.

When writing to any of the advertisers on this page please mention the American Florist.

New Orleans Horticultural Society.

This society gave a grand banquet at the West End on Saturday evening, July 1. The dinner was given in honor of the success of the last exhibition and almost every member was present. The society has increased almost double since the last show. The dining room and table were prettily decorated with flowers and the national colors. Some of the boys were a little behind time, but the general effect of the table seemed to put a gloss on their faces. C. W. Eichling, the president, made an opening speech, which was received with great applause. He dwelt chiefly on the future of the society and the south, also thanking the members who did their best to make the exhibition a success. While dinner was going on one of the members gave some fine selections from the well known opera of Carmen, which seemed to give the diners a bon appetit. After dinner a handsome gold-headed cane was presented to President Eichling. Presentations were also made to ex-President Joseph Miller, the pioneer of the society, and to John Eblen, the worthy treasurer. Speeches followed from C. W. Eichling, C. R. Panter, J. Eblen, J. H. Menard and C. Thomas. The dinner committee was composed of C. Thomas, J. H. Menard and C. Taube, to whom much credit is due. H. P.

Japan Pear Stock.

I would like to know whether the Japan pear stock is a success or not.

Babylon, N. Y. P. H. FOSTER.

WE request subscribers to make remittance by draft or money order when renewing subscriptions, and to keep a record of the numbers and dates of same. This is to guard against losses in the mails.

WHEN YOU arrive in Chicago make it a point to at once register your name and hotel in the book kept for the purpose at the headquarters of the Chicago Florist Club, 45 Lake st.

GLASS

which is absolutely perfect for modern greenhouse construction.

ROCK BOTTOM PRICES.

Send for Estimate. Satisfaction Guaranteed

REED GLASS CO.

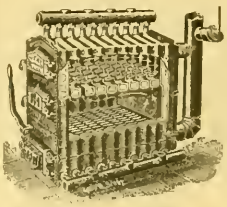
65 WARREN STREET and 46, 48, & 50 COLLEGE PLACE,

—NEW YORK CITY—

GREEN-HOUSE HEATING, MYERS & CO.

1518 & 1520 S. 9th St., PHILADELPHIA.

Send for catalogue and price list.



Royal Heaters.

—:o:—

HOT-WATER, STEAM.

Now is the time to send for a catalogue of

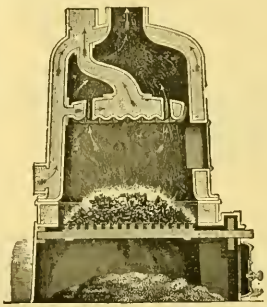
BOILERS

so you can make your selection for next winter.

Write us.

HART & GROUSE,

UTICA, N. Y.



JOHN A. SCOLLAY,

74 & 76 MYRTLE AVE.,

BROOKLYN, N. Y.

GREENHOUSE HEATING

—AND—

Ventilating Apparatus.

Patentee and Manufacturer of

HOT WATER BOILERS, GREENHOUSE PIPE, PIPE FITTINGS, VALVES, TANKS, ETC.

☞ Estimates of cost given, and Illustrated Catalogue furnished on application.

"God helps those who help themselves." And he who uses THE "NEW DEPARTURE"

(MEAT SAW)

VENTILATING APPLIANCE,

helps himself and those who help him in his labors, and is therefore doubly blessed. Send for price and description.

J. D. CARMODY, Evansville, Ind.

Or call and see the men and machine at his greenhouse office, located on the lawn west front of Horticultural Building, World's Fair grounds, Chicago, Ill.

SMITH & WEBSTER,

MAKERS OF

GREENHOUSE PIPE

FOR HOT WATER AND STEAM,

193 Lake Street, - CHICAGO, ILL.

PAINT

OR PUTTY.

For Greenhouses, Conservatories Or any other Structure. . . .

No Paint can be made too durable for the greenhouse, none too handsome for the homestead.

We make Paints BECAUSE WE KNOW HOW, and have facilities to do it. We ship to all Railroad Stations and Boat Landings without regard to distance, and will make prices laid down at your depot at figures which will pay you to patronize a cash market.

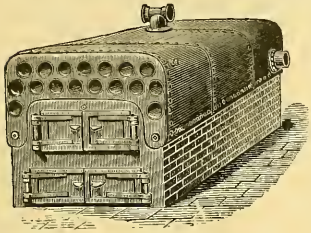
HAMMOND'S PAINT AND SLUG SHOT WORKS, Fishkill-on-Hudson, N. Y.

ESTABLISHED 1854.

DEVINE'S BOILER WORKS.

THE FLAT TOP TYPE

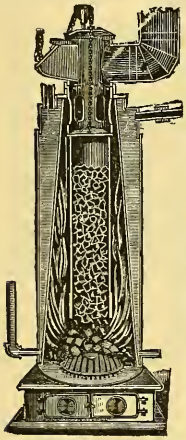
Wrought Iron Hot Water Boilers



Capacity from [illegible] of four-inch pipe.
SEND FOR NEW LIST.

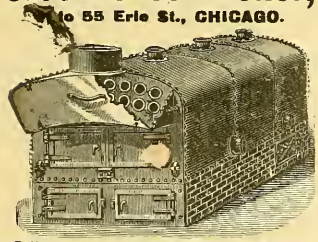
FRANK DAN BLISH, Att'y.

OFFICE, 189 STATE STREET.
WORKS, 56th & WALLACE STREETS.
CHICAGO.



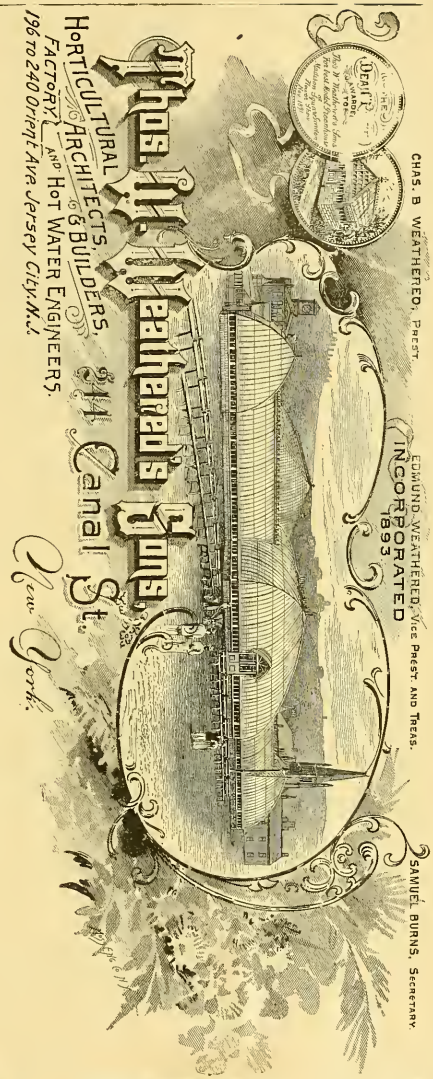
THE WILKS HEATER,
FOR HEATING
GREENHOUSES, STORES, DWELLINGS, ETC.
Manufactured THE S. WILKS MF'G CO. 123 S. Clinton St., CHICAGO, ILL.
SEND FOR CATALOGUE.

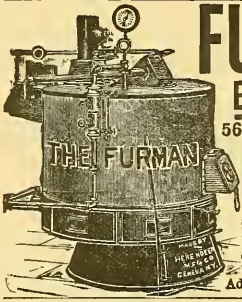
KROESCHELL BROS.
IMPROVED
Greenhouse XX Boiler,
[illegible] to 55 Erie St., CHICAGO.



Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around front, sides and back. Write for information.

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.





FURMAN BOILERS

Economical — Substantial — Safe.

56 STYLES AND SIZES—BURNS HARD OR SOFT COAL.

Modern Hot-Water Heating

These Boilers have a high reputation for Staunchness, Durability and Safety, and are GREAT COAL SAVERS. Minimum Friction and Maximum Velocity only obtained by VERTICAL WATER CIRCULATION. Send for new 150-page book giving full particulars and a great deal of valuable information on modern Heating and Ventilation, with plans and tables for correct hot-water work. Mailed free.
Address HERENDEEN MFG. CO., 26 [illegible] Street, GENEVA, N. Y.

VICTOR SPRAY PUMP.
The most wonderful pump ever invented. Requires no foot-rest or support. Send for prices.
HENION & HUBBELL, 55 N. Clinton St., Chicago, Ill.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.
OHE G. ESLER, Sec'y F. H. A., Saddle River, N. J.

Index to Advertisers.

Abel C C & Co.....1267
Adv. Rates, etc 1264
American Boiler Co...1276
Ancborage Rose Co. 1263 1264
Baller F A. 1269
Barnard W W & Co...1267
Bay State Hdw Co....1271
Bayersdorfer H & Co.1273
Berger H H & Co.....1267
Bock Theo. 1268
Bossall Jos E & Son ..1264
Boston Letter Co 1273
Brackenridge & Co....1270
Brauer & Richter.....1269
Brown & Canfield.....1263
Burns & Raynor.....1265
Burrow J G..... 1269
Burton John..... 1269
Carman R W.....1267
Carmody J D.....1274
Chandlee Geo F 1271
Childs John Lewis....1271
Corbrey T J 1264
Cox Seed & Plant Co..1267
Currey G W & Co.....1264
Davidson A E.....1270
De Lamater Iron Wks1271
Deyine's Boiler Wks..1275
Dillon J L.....1263
Dreer H A.....1267
Dunkley Joseph.....1269
Elliott W H.....1264
Ellison Wm.....1265
Fairbanks Morse & Co1273
Felbelm Lymas.....1273
Field S B.....1266 1268
Forstermann L.....1270
Gasser J M 1272
Goodel L W.....1269
Goodyear Rubber Store 1272
Grossman C M.....1268
Gurney Heater Co....1276
Hall Ass'n.....1275
Hammond Benj..1270 1275
Hancock Geo 1268
Hart James.....1265
Hart Michael A 1265
Hart & Crouse.....1274
Hartford H E.....1264
Helte Floral Co.....1269
Henlon & Hubbell....1275
Heredeen Mfg Co....1275
Herr Albert M.....1269
Hews A H & Co.....1272
Hillinger Bros.....1272
Hill E G & Co.....1268
Hippard E.....1273
Hitchings & Co.....1276
Hooker H M Co.....1271
Horace Edw C 1265
Hulsebosch Bros.....1267
Hunt E H.... 1265
Hunt M A.....1263 1270
Hunter J Purdy.....1269
James R H.....1267
Jennings E B.....1269
Kaufmann Ernst & Co1270
Kemble Floral Co 1263
Kennicott Bros.....1265
Koffman E 1264
Kroeschell Bros 1275
Kuehn C A.....1265
La Roche & Stahl.....1264
Lockland Lumber Co..1272
Lombard R T.....1268
Long Dan'l B.....1265
Lonsdale Edwin.....
.....1263 1267 1268 1269
Lord & Burnham Co...1276
McCarthy N F & Co...1265
McFarland J H.....1271
McFarland J H Co....1270
McGowan John.....1268
MacBean A S.....1263
Munz J & Co.....1270
Marschuetz & Co.....1270
Michel Plant & Bulb Co 1264
Milang Bros..... 1265
Moffatt G J.....1267
Moninger Jno C .... .1276
Moore Frank L.....1263
Moser J J.....1267
Myers & Co 1274
Niagara Falls Route..1268
Niles Centre Floral Co1263
Olson M 1268
Ouwerkerk P.....1268
Parker Geo L.....1263
Peck & Sutherland....1263
Peacock C J.....1268
Peacock Sam'l S 1264
Pierson F R Co. 1267
Prince A G & Co.....1265
Quaker City Mach Co.1272
Randall A L. 1265
Reed Glass Co.....1274
Rehnschelder Ernst..1267
Reiss & Brady.....1267
Roberts D H.....1272
Roehrs Theo.....1263
Rosemont Fred.....1269
Rogers Nurseries.....1268
Rolker A & Sons.....1270
Rupp John F.....1269
Russell S J.....1268
Sander & Co.....1270
Schoelder Fred.....1269
Schulz Jacob.....1263
Scollay John A 1274
Shelmire W R.....1268
Sheridan W F.....1265
Sherwood Hall Nur Co1268
Shrecht & Wadley....1270
Siptle, Dopffel & Co...1272
Situations, wants.....1266
Smith Nathan & Son...1269
Smith & Webster.....1274
Steffens N.....1271
Stoldt C 1269
Storrs & Harrison Co.1263
Stott Garden Imp Co..1270
Struck J N & Bro.....1273
Sunderbruch H L.....1265
Tesmer Julius & Co...1264
Tesson R F.....1263
Tricker Wm.....1268
Van Horne Griffen & Co 1271
Van Tubergen C G Jr.1267
Van Waveren & Kruyff.....1267
Vaughan J C.....1263 1267
Wabash R R 1268
Weathered's Sons T W1275
Weber & Don.....1267
Welch Bros.....1265
Whildin Pot Co 1272
Wight W P.....1273
Wilks S Mfg Co.....1275
Winter N D 1266
Wisconsin Flower Ex.1264
Wolf E E 1273
Wolff L Mfg Co.....1272
Wood Bros.....1263
Zinglebel D.....1269

YOU CAN never invest $2 to better advantage than in a copy of our trade directory and reference book.

CYPRESS GREEN HOUSE MATERIAL

CLEAR CYPRESS SASH BARS

HOT BED VENTILATING SASH

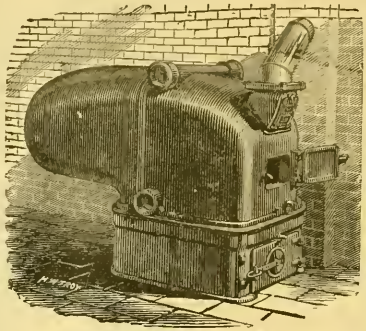
JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

Goodell HH Mass Agri Col 15 Jan 93

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

GREENHOUSE HEATING AND VENTILATING

Horticultural Architecture and Building.



HITCHINGS & CO.

Established 1844.

233 Mercer St., New York.

FIVE PATTERNS OF BOILERS.
NINTEEN SIZES.

Perfect Sash Raising Apparatus.

Rosehouses, Greenhouses, Etc., of Iron Frame Construction, Erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frame Benches with the "Perfect Drainage Bench Tile" or Slate Top.

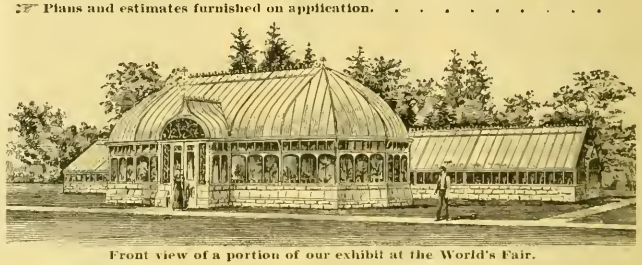
SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUE.

LORD & BURNHAM CO.

Horticultural Architects and Builders,

STEAM AND HOT WATER HEATING ENGINEERS.

☞ Plans and estimates furnished on application. . . . . .



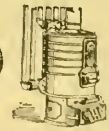
Front view of a portion of our exhibit at the World's Fair.

. . . SEND FOUR CENTS POSTAGE FOR ILLUSTRATED CATALOGUE. . . .

LORD & BURNHAM CO., Irvington-on-Hudson, N. Y.

Gurney

HOT WATER HEATERS and RADIATORS FOR HEATING Dwellings, Public Buildings, Etc. BY HOT WATER CIRCULATION



GURNEY.

The apex of success in house heating is reached by the Gurney Heaters. Their excellent work during the past severe winter is but another tribute to their superiority. Our book "*How Best to Heat Our Homes*" sent free to anyone.

Gurney Hot Water Heater Co.
163 Franklin St., Boston, Mass.
59 Wabash Ave., Chicago, Ill.

SELLING AGENCIES:
Johnson & Co., 71 John St., New York.
J. C. F. Traeksel, 246 Arch St. Philadelphia.

DOUBLE CROWN.

STEAM · AND · HOT · WATER · HEATERS

FOR

GREENHOUSE HEATING.

156

DIFFERENT SIZES.

American Boiler Company.

BOSTON,	NEW YORK,	CHICAGO,	DENVER,	SAN FRANCISC
195 Ft. Hill Square.	94 Center St.	34-36 Dearborn St.	Mining Exchange Bldg.	80 Crocker Bldg.

THE AMERICAN FLORIST

A WEEKLY JOURNAL FOR THE TRADE

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, JULY 20, 1893.** **No. 268**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company. Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.
322 Dearborn Street, Chicago.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY,
P. O. Drawer 164, CHICAGO.

Eastern Office: 67 Bromfield St., Boston.

The Ninth Annual Meeting

— OF THE —

SOCIETY OF AMERICAN FLORISTS

— WILL BE HELD AT —

ST. LOUIS, MO.,

AUGUST 9, 10 AND 11, 1893.

Members may remit the annual dues ($3.00) to the secretary or treasurer prior to the meeting, thus avoiding the crowd and relieving the officers on the opening day. Badge for 1893 will be sent by mail to those who remit in advance of the meeting.

Intending members can obtain any information wanted by addressing the secretary.

OFFICERS:

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer.

CONTENTS.

Society of American Florists 1277
St. Louis hotels 1277
The convention hall 1277
Rates to St. Louis 1277
Chairmen St. Louis committees 1277
Summer treatment of decorative plants 1277
Summer bedding ad valorem 1278
The World's Fair 1278
Alocasia Watsoniana (illus) 1279
Three new plants 1279
Roses and mushrooms at Doylestown 1279
Carnations—Seasonable hints 1280
Miscellaneous seasonable hints 1280
Dracæna Sanderiana (illus) 1281
Sub-tropical planting 1281
Philadelphia 1282
New York 1282
Boston 1282
Oncopanax Sanderiana (illus) 1283
Chicago 1283
Buffalo 1283
St. Louis 1284
Root cuttings of Tecoma grandiflora 1290
Toronto 1292
Cincinnati 1294

THIS is last call for photos for our convention number. Send to reach us by the 24th inst. at the latest. We cannot use any received after that date.

MR. Chas. B. Weathered and wife, of New York, are in Chicago, doing the World's Fair. While here Mr. Weathered is perfecting arrangements for opening a branch office in this city, which will be in charge of Mr. Wm. Jenkins. Mr. W. returns to New York next Saturday.

Society of American Florists.

The committee on nomenclature of the Society of American Florists desires information concerning the misapplication of names in the trade during the past year. All persons interested in securing a stable nomenclature of decorative plants are requested to send to the chairman of the committee at once a list of synonyms that they have observed, indicating the place in which they were seen and, in the case of evident intention to mislead, the circumstances in each case. Address William Trelease, Chairman, Missouri Botanical Garden, St. Louis, Mo.

St. Louis Hotels.

Below are given the names and locations of the hotels at which rates have been secured by the local committee for convention week, and the rate per day together with distance from convention hall and number each hotel can accommodate.

Hotel Barnum, 6th and Washington Aves. European plan, single, 75 to $1.50 double $1.50 to $2. Distance seven blocks. Can accomodate 50.

The Belvedere, 13th and Washington Aves. American plan, single, $2 to $2.50; double, $1.50. Distance two blocks. Can accomodate 50 to 75.

The Benton (gentlemen only), 8th and Pine Sts. European, $.75. Seven blocks. Accommodate 100.

Continental Hotel, 4th and Elm Sts. European, $1. Distance sixteen blocks. Accommodate 75.

Hurt's Hotel, Broadway and Chestnut Sts. European, single, $1; double, $1.50. Twelve blocks. Accommodate 200.

LaClede Hotel, 6th and Chestnut Sts. American, $2 to $3. Eleven blocks. Accommodate 100.

Lindell Hotel, 6th and Washington Ave. American, $2.50 and upwards. Nine blocks. 200.

Merchants Hotel, 12th and Olive Sts. American, single, $2; double, $1.50. Three blocks. 50 to 75.

Moser's Hotel, Pine St. between 8th and 9th Sts. European, single, $1; double, $1.50. Seven blocks. 50.

Hotel Rozier, 13th and Olive Sts. European, single $1 to $3; double, $1.50. Two blocks. 75.

Southern Hotel, 5th and Walnut Sts. American, $3. Fourteen blocks. 300.

St. James Hotel, 5th and Walnut Sts. American, $2. Fourteen blocks. 200.

The Convention Hall.

The coming convention of the Society of American Florists at St. Louis will be held in the Exposition Building, corner of 14th and Olive streets. All the important car lines pass within a square of the building. The meeting will be held in the Entertainment Hall and the trade display will be made in the rooms and corridors surrounding the hall. The hall is in the northwest corner of the building and is reached from the 14th street entrance. A picture of the Exposition Building will appear on the title page of our convention number.

Rates to St. Louis.

Latest developments in railroad circles indicate that by July 25 a rate of one fare for the round trip will be made to the World's Fair, and even lower rates may be made. Should this happen those east of Chicago may find it to their advantage to buy tickets to Chicago and then travel to St. Louis and back with the Chicago Florist Club, who will have made special arrangements for the trip. The Chicago Club's transportation arrangements are in the hands of Mr. P. J. Hauswirth, 318 Wabash avenue, Chicago.

Chairmen of Committees of the St. Louis Florists Club for Convention.

Reception: Wm. Trelease, Missouri Botanical Gardens.

Ladies' Reception: Harry W. Chandler, Jr., 717 Olive St.

Entertainment; J. W. Kunz, 706 Olive Street.

Bowling: Fred Ostertag, 2334 Washington Ave.

Decoration: Henry Ostertag, 2334 Washington Ave.

Badge: Julius Koenig, 6471 Florissant Ave.

Printing. Chas. Connon, 2742 Olive Street.

Bureau of Information: J. M. Jordan, 706 Olive St.

Hotels: Robert F. Tesson, West Forest Park.

Superintendent Trade Display. E. H. Michel, Magnolia and Tower Grove Aves.

Summer Treatment of Decorative Plants.

The past winter was a very severe one on plants that were used for decorating, many being killed outright, while a great many more were more or less injured from the unavoidable exposure of loading or unloading from the wagon. While in transit the plants are usually safe, owing to the improved appliances for heating wagons, but unless great care is taken while transferring them to and from the place in which they are used the plants are bound to suffer during such weather as was generally experienced last winter. Some of the injured specimens will not pay to keep over, for the season of active growth is too short for them to regain decent proportions, and in such case it is wiser to throw them away at once, but others may be made presentable for another season, and if not already done no time should now be lost in giving them a thorough overhauling, this to consist in

the first place of a good cleaning with solution of whale oil soap or other insecticide, and then repotting or topdressing as may be most expedient, the potting being naturally most effective.

Some of the strong growing palms may have a portion of the old roots cut away in order to keep them in small pots, for phœnix, seaforthias, arecas and some others will endure such treatment without special injury, but it is not advisable to adopt this method with latanias, or more harm than good may come from it. Therefore where it is not convenient to give the latanias a shift they may be improved by an occasional watering with liquid manure. Kentias do not require as much root space as many other palms and may be kept in good condition for two or more years without repotting, providing they are given a top-dressing or a weak stimulant from time to time, this characteristic rendering them especially valuable as house plants, as does also the fact of their thriving with very little sunlight.

After repotting this class of stock it should be kept somewhat closer and fairly well shaded and a little fire heat on cool nights during the summer will greatly increase the growth and prevent too great an accumulation of moisture in the houses, but this should not be understood as meaning that a Turkish bath atmosphere should be maintained at all times, for this high pressure system of growing only results in producing soft, flabby foliage that is not at all suitable for decorating. Ventilation should therefore be well observed; after the plants become somewhat established in the new soil some air being given at night also, and especially towards fall, in order to harden off the plants in readiness for their work. When freshly potted some judgment should be used in the simple operation of watering, and particularly with those plants of which the roots have been pruned, it being an essential point that the soil should be kept damp without becoming sodden. The soil for potting these plants has been so often described that detail seems unnecessary in the present instance, but it may be repeated that good, fibrous loam is the best foundation for the compost and that well rotted and rather dry stable manure is the most satisfactory fertilizer.

Pandanus also occupy an important place among the decorative stock, and while some large plants are useful yet the smaller sizes are frequently more convenient and valuable. In order to grow these on rapidly plenty of heat must be given, and also an abundance of light, only very slight shading being required in midsummer, and while small the plants should not be allowed to become badly potbound, for it takes them some time to recover from such a condition. Both Pandanus Veitchii and P. utilis make more rapid growth when the soil is not pressed too firmly in the pots, and the plants should of course be given room enough to properly develop into shapely specimens, a drawn-up plant of either giving but a poor idea of the beauty of these species when properly grown. Some complaint is heard every season that pandanus do not make satisfactory house plants, but in many instances this may be due to the plants not having been properly hardened off before being used for this purpose.

Ficus also require abundant light to produce strong, leathery foliage, and like the last named should have plenty of space to induce a stocky growth. Old plants may be cut back at any time, and with ordinary care will soon break out into new growth and be ready for renewed service in a few weeks.

Araucarias and aspidistras are both properly classed among cool house plants, but are both benefitted during the summer by having some shade, and neither of them require very much pot room to keep their roots in good condition. This is a good time also to divide the aspidistras, bearing in mind that the underground stems may be cut up into inch lengths and planted in pans filled with sandy soil and in due time will result in a crop of nice little plants, providing the plants are placed in a moderately warm house.

W. H. TAPLIN.

Summer Bedding Ad Valorem.

Coleus Fire Crest and Moonbeam are the two best of the newer varieties. Both are compact, free growing sorts, doing well either in exposed or shaded positions. Fire Crest is bronze bordered with bright red, with just a suggestion of yellow, very distinct. Moonbeam is creamy white and yellow edged pea green, serrated, wavy, foliage like Fire Crest. I think Moonbeam the best "light" coleus to date. I have tested it several years; it was one of my growing and has proved highly desirable. It sells at sight. You will make no mistake in growing both these sorts largely. The yellow sport from Paroquette—"Mrs. Haight" pans out well. It is as good a yellow as Golden Bedder and a better grower.

Alternanthera rosea nana is a good thing. Close, compact, and a very hardy sort, easy to keep over winter, It is of a pink shade in winter, but bedded out, assumes an orange red tint exceeding bright. I like it.

Cuphea Llavæ is a pretty useful flowering plant for baskets, veranda boxes and the like—as is torenia, especially the variety Fournieri. Sow the seed early in January or it will not be in bloom for spring sales. It has rather a Beaconsfield pansy effect, a rare color much sought after. By the way if my choice was necessarily confined to one pansy—Beaconsfield it would be. It takes the place of violets in summer and makes up beautifully.

Mme. Thibaut is the best of the newer fuchsias, after the general style of Black Prince, itself one of the very best fuchsias. I think however, Thibaut scores several points ahead of this popular sort. It is a splendid market kind. Penelope is another good one, double white, dwarf, erect, stout and bushy. Storm King still holds its own. Lord Byron is the prettiest single dark variety, very dwarf and free. Phenomenal and Mrs. E. G. Hill give big handsome blooms, but hardly enough of them to satisfy.

In geraniums you cannot beat the old Master Christine for a rich deep pink, and it knows enough to make a show for itself when planted out. Katie Schultz is as good a bedder as any of the scarlets, a light shade of peach pink. I regard Sam Sloan the best single red. It is a splendid bedder, large individual pips and great trusses of rich dazzling color. Bruant is a good enough semi-double scarlet, and I have an orange salmon Bruant—a seedling of 1891—equally as good. Souv. de Mirande is an excellant bedder, and La Favorite proves to be the best double white with me, inside and out, it is not inclined to dry rot as are several of the double whites. The old English Mount of Gold is a first rate bedder, dwarf thick growth with plenty of clear yellow leafage and innumerable small trusses of soft red bloom. Although good it is seldom seen nowadays. I always liked Happy Thought for outside. I do not care so much for the bronzes or tricolors for bedding.

For a good bedding lantana use one called Mine of Gold, dwarf, compact and very free, of rich orange yellow, a color not any too common in plants suitable for use outside. Abutilon Eclipse is desirable for bedding as well as for baskets and boxes, good both as to its flower and foliage—trained upright it makes a pretty flowering plant for winter I used it with genista for a mantel decoration in yellow, and the effect was very good. Impatiens Sultani is much liked for baskets and boxes. Here is the proper use of the lobelias in our climate, not very reliable for bedding, burning easily in a dry spell, and "damping off" in continued wet weather.

The trailing variety of polygonum is fine for basket work. A thick network of slender wiry stems with tiny round leaflets. Vines are what make the hanging basket or veranda box. The Iceland poppies are the summer cut flower just now—sweet peas are not in it. They keep so well, are so bright and airy looking, as if made of gossamer silk, with a satin sheen and woven with fairy fingers! One is reminded somewhat of the California poppies (Eschscholtzia) from the middle of May right on they can be relied on for abundance of bloom if cut freely. When first introduced some years ago a friend in England was telling me how exceedingly pretty and useful they were as cut flowers. I secured stock right away, and now they are a standard flower with my local summer trade, and immensely popular for several seasons past. Easily grown from seed and are perennial, also self-sown.

If you want canna seed to come right along get it into the earth as soon as ripe, and it will germinate almost as quickly as nasturtium seed. The longer you wait thereafter the slower it comes until, if you get it up at all, you will need to cut it, soak it, wait and perhaps give it up altogether. GROVE P. RAWSON.

The World's Fair.

Around the Horticultural Building the bedding gives promise of being very showy; the recently planted cannas seem to take hold well, and give a fair scattering of bloom. Mr. Blanc's cacti are now planted at the north front of the building, while along the north end is a part of the French display, consisting of Lemoine's gladiolus and some clematis, neither yet in flower. The gladioli are all named sorts, Lemoine's hybrids, and will be of great interest when in bloom.

Among the orchids now in bloom in the main building we note Pitcher & Manda's new cypripedium, C. Edwardii, a cross between Fairieanum and superbiens. The color is suggestive of Fairieanum, but the flower is a little larger, and the lateral petals are without the peculiar upward curl noted in that variety. The plant on exhibition is labelled with its value—$700—and this proves a great attraction to many people who would otherwise pass it unnoticed. A beautiful spike of Cattleya Dowiana, near by, very rich in color, is little noted compared with the $700 beauty. Among other orchids in bloom are Vanda guttata, Mormodes citrina, Odontoglossum crispum and several cypripediums.

In the Lord & Burnham houses, occupied by a part of the New York state exhibit, there is an admirable collection

ALOCASIA WATSONIANA.

of tuberous begonias from the Oasis Nursery Co. They are excellent, both in bloom and foliage and are admirably grown. The plants occupy the center table of the display house, the side benches being filled with gloxinias. It would be hard to find a more brilliant display than that made by these two plants; they are so covered with bloom and so uniformly well grown. In the little aquatic house several nymphæas are now in bloom, the pink Cape Cod lily, N. Zanzibarensis, N. alba candidissima and N. Marliacea chromatella. The aristolochia is still continuing in bloom. The two large beds in front of the department greenhouses, pyramidal in shape, are now planted with cannas, Yucca aloifolia, ricinus and other large leaved plants, bordered at the foot with achyranthus; they will be very noticeable with a little more growth.

North of the Horticultural Building, around the Puck, White Star S. S. Co. and Children's Building, portions of the French exhibit have been utilized in the flower beds. Vilmorin, Andrieux & Co. have some excellent snapdragons, very showy colors, calendulas, helichrysums, etc., very gay indeed at present. At the foot of the terraces north of the Manufactures and in front of the Electricity Building the rhododendrons have been removed; at the ends are beds filled with small yews, while the other beds are massed with Dracæna indivisa, New Zealand flax, pampas grass and Metake bamboos.

There is one innovation on the island—a carpet bed in the form of an Irish harp, built of Cotyledon secunda glauca, C. sempervivum and Alternanthera paronychoides. As Lincoln used to say, for people who like that sort of thing it is just the sort of thing they would like. The hollyhocks are making a good show—all double—and there are some fine colors among them, especially in a batch said to be of Japanese origin, which includes some excellent pinks and yellows.

In the rose garden at present the very best blooms noted are those of Mrs. Jno. Laing. This has kept flowering persistently, and both flowers and foliage are of fine quality. A grand rose for outside, and we all know its excellence inside. Another good thing is Dingee & Conard's Pride of Washington, trained along the wire fence surrounding the garden; it has been a mass of bloom, while Baltimore Belle made very little show. The teas are not making a great display at present; they have a good many blooms, but scattered. The sweet peas around the rose garden are blooming freely. A few lilies are in bloom; L. elegans, red, and L. Krameri, delicate pink of elegant habit, are now in flower. The spring blooming plants are gradually being replaced by later material; had it not been for Mr. Thorpe's foresight in providing for this a good many exhibits would look very bare by August. One of the handsomest herbaceous plants now in bloom is the shrubby Hypericum Moserianum, with large bright yellow flowers. It is to be seen on the island and also in J. J. Moser's exhibit north of the Woman's Building. Other things in bloom are Gypsophila paniculata, Stylophorum diphyllum (the celandine poppy), Lychnis chalcedonica, Coreopsis lanceolata, feverfew, harebells, foxgloves, etc. The German stocks continue to be very attractive.

The Californian exhibit in the north court of the big building is of interest, though the planting might have been more tasteful. There are orange and lemon orchards, both having a number of trees in bearing; these plots are bordered by Cupressus macrocarpa, plants about one foot high; a few palms are put here and there, Washingtonia filifera, Chamærops excelsa, and Phœnix canariensis, while along the walls of the court tea rose bushes are planted.

The fancy-leaved caladiums, now moved to the main building, under the dome and in the curtains, are now in fine order; they include Mme. Ducharte, Alphonse Karr, Clio, Meyerbeer, and other familiar show sorts.

Among succulents Agave Parryii is now in bloom; it is a handsome variety, blooming early, and is generally admired.

Three New Plants.

Alocasia Watsoniana, named in honor of the assistant curator of Kew. Leaf shield shaped, of a bronze green color, with silver veins and prominent ribs. Back of leaf velvety crimson. A stove plant introduced from Sumatra. Discovered by Micholitz, one of Sander's collectors.

Dracæna Sanderiana. This comes from west Africa and undoubtedly has a great future as a decorative plant for the table. Foliage white and green and very substantial. Plant vigorous and easy to propagate.

Oreopanax Sanderiana. A decorative foliage plant from Colombia. It belongs to the ivy family and in appearance can be well compared to Aralia Sieboldi, but is more elegant. The leaves are triangular, of great texture and substance and it is believed that the plant will make a valuable market variety.

These three novelties were exhibited by F. Sander & Co. at the World's Fair at Chicago.

Roses and Mushrooms at Doylestown.

Doylestown, Pa. is an old fashioned county town about twenty-six miles from Philadelphia. There are about 3000 inhabitants within its borders in its normal state. When the court sits or when conventions are in session, there are a good many more, however, for Doylestown is the county seat of Bucks county. The adjacent territory is a rich agricultural county dotted with little villages, which depend on Doylestown for railroad facilities, applejack, and a good many other things, great and small. But it is not its county fair, nor its prosperous farmers, that makes Doylestown interesting from a florist's point of view. It is the mushroom industry that has made Doylestown famous.

Away back some ten years ago J. Y. Smith, a florist, and Allen H. Heist, a hotel keeper, both thought they saw something in raising the delicious esculent. Mr. Smith, who was connected with railroading before he became a farmer and florist, and whose head was always full of new ideas, used an abandoned silo for the mushrooms, and great were the crops he took from that same silo. Mr. Heist used a vault behind his applejack distillery and did well with the mushrooms also. In a year or two they had the whole countryside talking about the new departure in open mouthed wonder. Quite a few went into the thing with more or less success. The newspapers wrote it up on more than one occasion, and added still more to the fame of Doylestown as the mushroom center of Pensylvania.

To-day both the above parties are still actively engaged in growing mushrooms, at least Mr. Heist is, and Mr. Smith may be said to be doing it by proxy, for this summer he has rented his silo and barns to Mr. John E. Andre along with the greenhouses, where he grew roses principally. And speaking of Mr. Andre calls to mind that he, also, has made quite a success of mushroom growing during the past four years. He boarded over the spaces between his rose-houses about eight feet wide and about one hundred feet long between each, and grew the mushrooms therein. Two years ago he marketed 2600 pounds of mushrooms, and this past year with some added space of the same nature he cut 5200 pounds—just double. Mr. Andre states that the average price realized last season was lower than that of the season before on account of the greater number in the business, and on account of the old growers having largely increased their out-put. The average price realized last season was 50 cents per pound, which Mr. Andre considered still left a good fair margin of profit to the grower. Next winter with the Smith establishment which he has just rented he will have 12,000 feet of additional surface for mushrooms. Mr. Andre was foreman for Mr. Smith for six years before building his own greenhouses. He has been very successful at rose growing. All his roses go to Philadelphia, but he has to look to New York for his mushroom outlet. The roses he grows are mostly American Beauty, Bride, Mermet, and Niphetos. He has always been very successful with the Beauty, which says some thing for his skill as a rose grower, although he is too modest to imagine that he knows it all yet. With the 20,000 feet additional glass which he will have from the Smith place he will doubtless be felt with his roses in the Philadelphia market next winter more than ever.

Among other mushroom growers about Doylestown, S. Edward Paschall has been a noted success. He runs a truck farm, and at one time was the editor of a country paper in Bucks county. Like all the newspaper editors he is chock-full of ideas. One of his ideas at present is that we ought to be able to make our own spawn in this county. Mr. John G. Gardner of Jobstown, N. J. avers that it can be done easy enough, but that it don't pay in competition with the imported article. However that may be Mr. Paschall made his own spawn last year, and this year he has taken the bull by the horns and has prepared quite a quantity with which to furnish others in addition to what he will need himself.

In addition to the many growers about Doylestown, there are others of some extent near by whose existance is traceable to the Doylestown influence. Among these may be mentioned the place of Dr. German at North Wales, and that of the Mushroom Culture Co. at Lansdale.

The Burpee Seed and Stock Farm is also a notable feature of Doylestown, and the trial grounds, etc., of Mr. Samuel Wilson at Mechanicville a few miles from Doylestown are also worth going to see. Altogether Doylestown is a great little town, and is well worth a visit by any florist who has a day to spare for a pleasant country ramble, where he can blend amusement with instruction, while he fills his lungs with Bucks county breezes and his inner man with draughts of the richest milk in the world.

Philadelphia. G. C. WATSON.

Please mention the AMERICAN FLORIST every time you write to an advertiser.

Seasonable Hints.

Greenhouses should always be built with a view to convenience. Not merely as to width and height of benches, but so arranged that the soil can be easily and quickly placed in them or removed therefrom. This is a matter which concerns not only carnation growers, but all owners of glass houses. We refer to it here because it is seldom alluded to in print, and not sufficiently taken into consideration when the houses are building. We have seen houses built on such a poor plan that it was necessary to remove some glass at various places on the roof near the gutter in order to get the soil to the benches from the outside, and then shovelled from bench to bench. Probably this arrangement is more general than one would suppose, but certainly not to be commended. A large window is often placed at the end of the house through which the soil is wheeled over the benches and dumped where needed. This plan is no doubt expeditious, but is, we should think, very hard on the benches, particularly if they are a little old. I suppose every one likes his own plan best. That is our case exactly. It is really a fact however, that situation and surroundings have much to do with the detail of greenhouse management. We are always the creatures of circumstances, and must not be too severe in our criticisms.

Our own plan is to have a door at the end of each alley, either opening into the potting shed or out-door, or it may be both. When there are three alleys to a house the middle one is usually narrow, and no door is required; the benches can be reached from the side aisles. These latter are all twenty-two inches in the clear, which admits of a wheel-barrow of special make to run therein very freely. The compost heap being within convenient distance two men with barrows will move and place on the benches a very large quantity of soil in a day. They work together and help each other dump their barrows by lifting them bodily. If there is only one man at work the soil is shovelled on to the bench which takes longer of course. Manure is wheeled in in the same manner, and the soil not wanted as readily removed.

Avondale, Pa. W. R. SHELMIRE.

Miscellaneous Seasonable Hints.

When you tie up your new beds of smilax and asparagus (and they should be strung up soon after planting) don't use the common white string. In decorating it has to be removed, which much mars the beauty of the smilax. Use shoemakers' dark green thread; it is strong and invisible. It is more expensive than white string such as grocers use, but cheaper in the end. You can buy it at any shoemaker's supply store.

Cinerarias and primulas that are wanted in flower by Christmas should now be in 2-inch pots. There is no better place for them than a shaded frame with the sash tilted back and front, but a well ventilated, shaded house will do about as well, and a great advantage with the house is they are continually before your eyes and you don't run the risk of forgetting.

There is a great and increasing demand for small ferneries for the dinner table. This greatly increased demand has made this class of ferns very scarce. Buy them at once if you are not already supplied or you won't get them at all in the fall and winter. Don't put them in a close, warm house with too much shade, or by winter time they will have grown too long and soft. Give them shade and plenty of air and they will grow sufficiently fast. A small pandanus or Cocos Weddelliana are both good for the center of the fern dish if it is from 8 to 12 inches across; if much larger a small kentia or areca can be used. The best half dozen ferns for the purpose are: Davallia stricta, Onychium Japonicum, Pteris cretica, P. c. albolineata, Pteris magnifica, Pteris serrulata cristata, Pteris adiantoides, Adiantum pubescens, Cyrtomium falcatum. For larger ferneries: Pteris tremula, P. argyrea, Polystichum coreaceum, Lomaria ciliata, Blechnum occidentale and several other larger growers will do. Use sparingly Adiantum cuneatum. The continual order is: "Don't put any maidenhair in my fernery." For one evening's use there is certainly nothing so beautiful as A. cuneatum, but it won't stand the temperature of the dining room.

The first bulbs to arrive are the Roman hyacinths, and they will soon be here. No bulbs are benefitted by being kept out of the soil for any length of time, still August is too early to box the Romans, for they would get too far advanced before winter came. It is desirable to have a few as early as possible, so put some in flats at once and do the same every two weeks till the end of September, when the whole of them can be planted. I prefer to place the boxes outside, keeping them off the ground with some old boards, and after a thorough watering three inches of soil is all the covering they need. If weather continues dry they will need a good soaking every week. Neither hyacinths, tulips or narcissus need a rich soil, such as you would prepare for lilies, etc. Any old soil will do if it is in the right condition. An old carnation or rose bed thrown out would be just the ideal stuff for all of them. In too many places and even in some extensive places you see all kinds of boxes in use for forcing bulbs. An old soap box seems the favorite, but there is sure to be a great variety. They are often too deep and too broad, don't fit into the bench, will kill a man to carry them in (frozen perhaps), in fact they are a nuisance and nothing but a box made for the purpose should be used. There is no need of getting them made at a planing mill; you can make them as well on your own place and now is a good time. Overhaul your old boxes and make what you will need for September and October, for remember you have much more time now than you will have then. The dimensions of the box that suits me best (and I have made and used thousands of them) is 2 feet long, 13 inches wide outside and 3 inches deep inside. This box will hold 50 Von Sion or Paper White, 60 Romans, 60 of the larger sorts of tulips, or 72 of such tulips as La Reine or Vermilion brilliant. Get your strips from the mill, sawed out for you (good sound lumber). The ends are cut into 1-foot lengths 1 inch by 3 inches. The sides and bottom are 2 feet long and 3 inches by ½ inch. A strip on each side and four on the bottom complete, the box and the strips at the bottom are wide enough apart to give good drainage, if that is of any consequence. It takes no time at all to saw into lengths and nail a few hundred of these boxes together, and the cost

DRACÆNA SANDERIANA.

of each is about 6 cents. If you send out plants in the spring for your local trade, either in pots or out, there is nothing more convenient than this size of flat, and if the boys don't bring them all home it won't "bust" you. WILLIAM SCOTT.

Buffalo, N. Y., July 17.

Subtropical Planting.

By subtropical planting is meant the use of large masses of plants of large size to give a tropical appearances to a lawn or flower garden. To give a good effect the beds must be large, the larger the better, and the soil must be rich, so as to insure a rapid growth. The best shape is oval or round if standing out on a lawn, but an irregularly shaped border as a back ground for a lawn or garden is very effective. It is a good plan to dig the bed out to the depth of about three feet, and fill the bottom with leaves or horse manure to make some bottom heat, then fill with light and very rich soil. Do not fill the bed too full; so that you can turn the hose into it and soak it when the plants are growing without the water running away from the center.

For a large bed Musa ensete is a good center, Aralia papyrifera and Arundo donax variegata next, then cannas, Solanum robustum, dracænas, wigandias, Eulalia gracillima, and zebrina, Grevillea robusta, Caladium esculentum, alocasias, amaranthus in variety, salvias to give a little color with their flowers, and edge with coleus.

For a large border make a back ground of Arundo donax, which is hardy, and if well fed grows to a large size, Eulalia Japonica, Aralia spinosa, bamboos, and large cannas, then you can plant cannas, dracænas, caladiums, solanums, yuccas, Bocconia cordata, aralias, grevilleas, tritomas, Cyperus papyrus, eucalyptus, helianthus, Arundo donax variegata, wigandias, ricinus, nicotiana, salvias, coleus, etc.

Palms can be used to advantage out of doors in summer, if kept partly shaded from the direct rays of the sun, and it improves them; they come in in the fall much better color and stronger and stiffer for it. Our summer treatment of palms has been to plunge the pots to the rims in a bed of ashes, underneath trees, so as to give shade, and to apply the hose freely to foliage, taking care that none of them got too wet at the roots, nor yet dried out. By putting the plants out early in June and bringing them in early in September they suffer no check, and it is surprising the growth that they make in summer and the almost perfect freedom from insect pests that they enjoy out of doors. Latanias, arecas, kentias, seaforthias, and phœnix are much improved by their summer's change of air, and where it is convenient to place the plants out of doors in the shade some very fine effects can be produced. But if not well shaded and conveniently situated for watering, don't put them out.

Crotons are very useful for bedding out as well as for greenhouse decoration, but are not, unless in a very warm and favored spot, to be depended on in a latitude north of Philadelphia. If the plants are wanted for greenhouse decoration in winter or for planting out after a winter's use it is best to take cuttings of strong leading shoots, not too hard, and strike in sand or cocoanut fibre in the cutting frame in strong bottom heat, keeping moist and close. As soon as rooted give air gradually. When rooted pot off in light soil, and keep in heat till established, then gradually harden off, giving more air, but still keep in a night temperature of 60°. In spring give more air and gradually harden off till they will bear exposure before planting out, which should never be done till June. When planted out they should be syringed in dry weather when the sun is off them to keep down spider, and they must be kept moist at the root. It is a good plan to save the old stock plants to mass in the center of the bed, as the bare and leggy stem can be concealed by the better furnished young plants. For conservatory decoration in summer large crotons are very useful, and to make specimens is an easy matter by taking young plants and as soon as about eighteen inches high pinching back, and keeping growing as fast as possible in plenty of heat and moisture. With many of them it is not necessary to pinch at all, as they grow bushy naturally. Use a good fibrous loam with a liberal supply of sand to keep the soil open, and do not allow them to get dry at the roots, or you will be sure to lose the bottom leaves, and that spoils the plant. In order to get them well colored grow close to the glass, so as to give plenty of light; do not have them under the other plants, and then when they have no color say crotons are no good; give them a show. Shade moderately, but not heavily, and if for use out of doors gradually withdraw shade altogether. If not watched in syringing and watering spider and thrip is sure to appear. The first can be kept down by syringing and not allowing the plants to get dry at the root. For thrip dip the plant overhead in strong tobacco water, or else a solution of fir tree oil, but if the house is kept moist there is not much danger of either pest troubling you. There is a large number of varieties of crotons in cultivation, and they can all be traced as sports or seedlings of three or four species. The majority of all the varieties can be traced to Croton pictum. I shall not attempt to describe all the varieties but only speak of a few of the finest and most distinct, for many of them much resemble each other. C. angustifolium; leaves long and narrow, dark green with mid-rib and margins bright yellow; species.

C. Baron Frank Sielliere. Leaves very large and broad; bright green mid-rib and nerves white, very strong, and vigorous grower, one of the best varieties in cultivation.

C. Crown Prince. Strong vigorous grower, lanceolate leaves a foot long, bright green mid-rib and nerves yellow; sometimes marbled on surface of leaves. A strong upright grower.

C. Earl of Derby, Trilobed foliage, suffused with red; stems and mid-rib yellow.

C. gloriosum. Long narrow leaves, drooping habit. Ground color green, mid-rib creamy yellow, banded white down leaf, sometimes spotted white. A distinct and handsome species.

C. illustris. A very distinct and handsome variety; leaves bright green, trilobed. Mid-rib yellow, sometimes the point of leaf bright yellow, a strong grower and very showy.

C. chrysophyllum. Small leaf, golden yellow, useful for bedding out.

C. Imperator; leaves pale green, very large marked and mottled creamy white; very strong grower.

C. lancifolium, long narrow leaves, mid-rib, margin and veins pale yellow, changing to pink. Strong upright growth.

C. majesticum. Long leaves of drooping habit, color light green, ribbed yellow when young, changing with age to crimson, and the green to olive.

Other distinct varieties for planting out

are C. maculatum, Disraeli, Youngi, Lord Cairns, Queen Victoria, tricolor, Veitchii, Hookerianum, recurvifolium, eburneum, pictum, interruptum, etc.

Hackensack, N. J. JAS. S. TAPLIN.

Philadelphia.

Professor Thomas Meehan of Philadelphia is one of the most learned botanists and horticulturists of this country. He is the editor of *Meehan's Monthly*, a journal devoted to horticultural topics and is also a prolific writer for magazines and newspapers. He still continues his researches in botanical science, in one particular branch of which he has achieved an eminence unequalled in Europe or this country. Mr. Meehan is now serving his sixth term in common council, to which office he is re-elected unanimously, all parties uniting in placing him in nomination. It was his interest in more small parks for the city that led Mr. Meehan, after much persuasion, to first allow his name to be used, and during his eleven years' term of office he has kept that object steadily in view, and the many breathing places added to the city plan during his term of office are mainly due to his efforts. His successful efforts in this direction excited the admiration of his fellow citizens and on July 4 in Vernon Park, a beautiful spot near his home, which, after a severe struggle, he succeeded in having established as a park, he was presented with a handsome silver plaque in testimony of their appreciation of his establishing small parks in the several sections of the city. The plaque is a masterpiece of the silversmith's art. It is of solid silver, nineteen by twenty-four inches in size, mounted on dark blue velvet background, framed in carved mahogany, set in a polished mahogany shadow box, thirty-one by thirty-six inches and covered with plate glass. It presents in appearance the original parchment grant or charter to Wm. Penn. It has a silver copy of the Penn seal pendent and is surmounted by the coat of arms of the city, all in the same metal. In the central part of the top of the plaque is the following quotation from Penn's letter to his commissioners, dated September 30, 1681:

"That it may be a
Green Country Town
and
always wholesome."

The following inscription fills the center of the plaque:

"Presented
to Thomas Meehan by
his fellow citizens of Philadelphia in
grateful acknowledgment of
his services while a member of
the
Councils of Philadelphia,
1883-1892,
in establishing
small parks
in the several
sections of
the city
for the
health and enjoyment
of its citizens."

In the four corners of the plaque are depicted scenes from Penn Treaty, Stenton, Bartram and Vernon Parks. This is a magnificent testimonial and is evidence to Mr. Meehan that his efforts to beautify the city are recognized and appreciated. Messrs. Caldwell & Co., silversmiths, are so well pleased with their work that they have obtained permission to exhibit it in their window and afterwards at the World's Fair.

Asters and gladiolus have been added to the summer stock, which is becoming a little better, as roses planted for cutting at this season are getting into shape. Robt. Craig is cutting some fair Albanys; this rose on account of its color is better for summer than La France, which bleaches considerably in hot weather. Marie Guillot is commencing to come in good size and form, Heacock and Becker are sending some good blooms of this variety. Carnations still hold out very well, the colors being mostly white and pink. Tea roses are now bringing from 2 to 3, while a few Beauties can still be had at from 15 to 20. Carnations 75 cents to 1. Sweet peas 25 to 30 cents a hundred. Asters 25 cents a bunch of 25 flowers, gladiolus $5 a hundred stalks, valley 4, pond lilies 50 cents a hundred. White hollyhocks .75 to 1.00. Balsams have made their appearance and bring 25 to 50 cents a hundred; adiantum .75 to 1.00, smilax 15, asparagus 50.

R. H. Loncope, of Holmesburg, is adding another violet house. Violet growers are complaining that their stock of plants outside is not doing well, the weather being too hot and dry. There has been very little rain for some time.

Firch & Hartley, two young men lately in the employment of Myers & Santman, have gone into business for themselves and are erecting three houses in Spring Village. They intend growing roses and carnations. Messrs. Firch & Hartley are well versed in the business and their stock will no doubt be such as to find a ready sale. We wish them success. This locality is fast becoming a growers' center. Messrs. Lonsdale, Burton, Butler, Myers & Santman, and now Firch & Hartley are all within hailing distance of each other, and their success will no doubt bring more of the trade to this neighborhood.

Are you going? is now the question of the hour, and is answered in various ways. Some come out with a flat no, others say it depends on certain contingencies. "Yes, I'm going," is heard from quite a few, and we suspect that when the time comes the delegation will present quite a respectable appearance in point of numbers. Those who have made up their minds should notify the committee at once, as it is very important that they should know how many are going.

The illustration "after the hail storm," in the last issue of the FLORIST, gives a very fair idea of the appearance of John Westcott's or Habermehl Brothers' greenhouses after the recent storm.

The house committee had the alleys cleaned up the early part of the week and a number of the boys met there last Thursday night for practice. Two sides were selected, Messrs. Harris and Kift being captains. Harris' team, Messrs. Anderson, Brown, Bearn, Westcott and Burton looked formidable, while Kift's bowlers, Messrs. Crawford, C. L. Allen of New York, who happened in, Geo. Craig, Nisbet and Campbell, played ball and won a match of two games by six pins. Campbell made three strikes in the last three frames of his second game and won the match for his side. The gas had not been put in since the fire and the game was played by candle light, they being placed at intervals along the edges of the alleys.

Charles Weathered and wife passed through Philadelphia on board the Columbian express last Friday afternoon, bound for the World's Fair.

Robert Craig has returned home after a five weeks absence in Chicago. K.

New York.

Never in the history of the flower trade has business been so dull as at present. Everything is at a complete standstill, with not the least indication of any immediate improvement. The retail stores look deserted. Some of them make almost no attempt to have their windows attractive or even neat; others, although the whole decoration may consist of a vase of larkspur or a pan of pond-lilies merely always appear clean and pretty.

The stock coming in consists of sweet peas by a very large majority. Somehow the impression got abroad among the growers last year that somebody was making money out of sweet peas. The result is what generally occurs in such cases. This year they have overdone it to such an extent that peas are coming in every day, mountains high, and there is no possibility of doing anything with them. The wholesalers are glad to get fifty cents per hundred bunches for them, twenty-five sprays to the bunch, and the quality is of the best, including all the newest and choicest varieties.

Roses are improving in quality but the demand amounts to almost nothing as yet. Meteors are particularly fine and this variety is proving as never before its admirable summer blooming qualities. Carnations are coming from outdoors and the houses both, but in either case the blooms are small. At the 34th street Market there is an enormous receipt every morning of candytuft, hollyhocks, cornflowers, achillea, feverfew, larkspur, and lilies, the latter including auratum and longiflorum now as candidums are all finished. Longiflorums are sold as low as $1 per hundred blooms.

The supply men say that the semi-annual summing up at July 1, shows that the first half of this year has been quite satisfactory in the amount of trade, and although the past week has been the dullest of the year they look confidently forward to a brisk fall business. Those who handle forcing bulbs are preparing for a brisk lily campaign very shortly, in fact some early lots of Harrisii bulbs have already been received and delivered.

Boston.

There is but little doing in the flower line at present. The only thing that seems to hold out well is funeral work, and some of the florists find considerable of it to do. It is profitable for them just now, for candidum lilies, feverfew, white carnations, gypsophila, and sweet peas are obtainable in large quantities for but little money and the price of a funeral design remains as in winter, viz, all you can get out of the customer.

Good roses are rather scarce and sell fairly well. Carnations and sweet peas are badly overstocked. Among the prettiest things in the florists' windows are the corn flowers and coreopsis and other garden productions which although cheap yet never appear coarse or common.

There was a good display of garden flowers at the weekly horticultural show on the 15th inst. From A. A. Hixon of Worcester came a collection of petunias the equal of which has never been seen here. Many of the blooms were grand. T. C. Thurlow's delphiniums were also fine. J. R. Leeson of Newton Centre showed a finely bloomed plant of Cattleya Leopoldi which received a first-class certificate of merit.

The Gardener's and Florist's Club met on July 11. The matter of a club picnic was postponed on request of the committee in charge and in the matter of

OREOPANAX SANDERIANA.

the floral contest at Chicago it was voted inexpedient to participate.

Mr. and Mrs. H. H. Battles of Philadelphia passed through Boston on their way to the New Hampshire mountains. They were in charge of that cunning little bit of humanity, Miss Grace Battles, famous from having a carnation named in her honor as well as for the sprightliness with which she carries the weight of her three summers.

The sum of $100,000 has been appropriated for a site for new city greenhouses, the old grounds having been devoted to an extension of the city hospital.

There will be another florist store on Boylston street soon.

J. A. Penman of New York is in town.

Chicago.

Last Thursday evening was one of the hottest of the season and it was doubted by many whether there would be a quorum at the meeting of the Florists' Club that occurred that night, but much to the surprise of these members there was quite a turn-out, and several members came loaded with business that required immediate action.

President Hauswirth was appointed a committee of one to arrange for transportation from Chicago to the St. Louis convention and the officers of the association were instructed to arrange for some suitable entertainment of the visiting members of the S. A. F. while in the city in attendance at the Horticultural Congress, which occurs the week after the St. Louis convention. On the recommendation of the committee in charge of the matter the projected contest in the arrangement of flowers at the World's Fair in August was abandoned.

It being noted that the register at club headquarters was not receiving the signatures of all of the visitors to the city, the secretary was instructed to procure a duplicate register and have same placed in the Horticultural Building at the World's Fair. The register will there be in charge of a suitable person and each day the names registered in the World's Fair register will be mailed to club headquarters and there added in by the secretary, while those that appear in the register at club headquarters will be forwarded to the party in charge at the World's Fair and by him added in to the World's Fair book. In this way it is expected that the register of visitors will be always complete, and that consultation with either register will show just who is in the city and where they are stopping.

Mr. Ludwig Schiller read a paper upon azaleas. There were several visitors present, namely, Mr. A. Gilchrist of Toronto, Mr. Wm. Jenkins, representing Thos. W. Weathered's Sons, of New York and Mr. Cole of Peoria. Each one favored the club with brief remarks, Mr. Gilchrist giving his impressions of the Horticultural Department of the World's Fair, which were well received by the club.

It being the opinion of the members that the so-called display of horticulture in the Illinois State Building was a disgrace to the horticulturists of the state, a committee was appointed to prepare a suitable resolution expressing the disapprobation of the club, and protesting against the display being allowed to stand as representative of Illinois horticulture.

It was decided by a unanimous vote to discontinue the monthly suppers during the hot weather.

The Horticultural Society of Chicago held a meeting on the 12th inst. The proposed changes in the constitution and by-laws were adopted, and other routine business disposed of. All matters connected with the annual fall exhibition are in the hands of the executive committee, which reports everything in good shape.

Messrs. Robert Craig and A. Blanc returned to Philadelphia on the 12th inst. after having been nearly a month at the Exposition.

Business is better than last week; there is rather more stirring, and as stock in several lines is shortening, any increase in demand is felt at once. There is little change in prices, but they are less fluctuating. Carnations are lessening in supply, but are still plentiful. Roses improve in quality; Beauties are of fair quality, but open very quickly; La France, while good in size, are badly bleached out by the sun, and Albany is preferred. Few growers here make any pretense at growing summer roses for summer trade; one sees a few Guillots of indifferent quality, but good roses are very scarce, as a rule.

Among cheaper stuff, sweet peas are still a terrible glut; during the past week they have been sold in thousand lots as low as $1 a thousand. They have suffered in quality, too, owing to the excessive heat, and there is very little sale for any color but pink. Cornflowers are very plentiful too, the typical blue being the only color desired. A few white hollyhocks (double) are sent in, but there is no call for them. Coreopsis is unsalable. Asters have made their appearance in limited quantities, and some nice pot plants are in the market.

Lilium auratum is very plentiful and much of it very good; it appears that everyone is growing it. Although the best brings $8 to $10 a hundred, a good deal is sold for much lower, and, one would think, will scarcely pay for the bulbs. There is no sale for Lilium speciosum, red or white; it cannot compete with auratum. There is no lack of longiflorum and Harrisii now. There was a great call for white flowers during the past week, owing to an extra amount of funeral work, due, no doubt, to the heavy death rate during the prolonged heat.

Buffalo.

Business all round is very flat, and there is an abundance of flowers to meet the light demand. Gloxinias of fine quality are seen in several flower stores, and as its great adaptability for house culture is well known here they sell well. Japan lilies, auratum, roseum and album are also abundant in town, and very useful they are. A few of the store keepers who have rather an abundance of help just now have drafted several of their hands to the greenhouses, where they are daubing on the paint in great style. It is that or a release, to use base ball parlance, and the painting is preferable.

There was a fair attendance at the last meeting of the club, but some decisive business was transacted. It was resolved to tender to the Chicago Florist Club a trophy to be competed for at the World's Fair for a floral design, but it is of no avail, as we have just heard the competition is dropped. It would certainly be a very poor time of year to get flowers suitable for fine designs. The most important, if not the most cheerful, action the club has taken lately was abandoning all preparations for a flower show this fall. There was hardly a dissenting voice, and we think the conclusion wise. Our annual exhibition has steadily improved in every respect, while the attendance has

steadily declined, and we think as it's the World's Fair year we will give the public a rest, and revive it again with renewed energy next year. The men who are the backbone of the Society and who have had to put their hands deep into their pockets to make up deficiences are feeling a little tired.

The Rochester florists are coming here on the 25th to play the Buffalo boys a game of ball. What presumption for the villagers to dare to cross bats with the team that vanquished a nine that was selected from the entire United States. It is said the same umpire will *not* officiate that did at that national game. The absence of Mr. W. J. Palmer in Europe did not prevent Mr. Christenson, the professor and W. S. from paying a visit to his large place in the village of Lancaster, N. Y. Mr. Palmer came to this country in '57 from Cheltenham, Gloucester, England. He is the pioneer florist of this city and can amuse the younger generation greatly by telling of his early experiences when he first tied primroses on two bits of lath, some 30 years ago, and when you could see no more lath he called it a cross. Mr. Palmer has been very successful, and well earned a good long vacation, but really his absence is a blessing in disguise, and he need not worry at all. We found W. J. P. Jun. in cowboy hat, roomy overalls and pitching right into work; he was surrounded by a small army of men and half grown boys. House after house is planted with Beauties, Brides, Meteors, Mermets, etc., and looking fine, in fact little remains to be done in that line, and before the old gentleman returns every inch of greenhouse will have a coat of paint, both outside and in, and the venerable W. J. will see his place looking as it never looked before. How few men are blessed with such a steady boy as "Billy." Most young men at his age are taken up with baseball, bicycle or Brooklyn handicap, or perhaps worse. We have just greatly enjoyed a brief chat with Mr. Kidd of the Sherwood Hall Nurseries, San Francisco. He was not to see us on business, but he took our breath away when he spoke of 60 acres of sweet peas. W. S.

St. Louis.

On Thursday, the 13th, the regular monthly meeting of the Florists' Club was held, and the attendance was the best since the spring season opened, showing conclusively that things are slackening up considerably.

The committee having the show in charge reported to the club their proceedings regarding the securing of the hall, and Mr. Michel was chosen as a committee of one to definitely close with the managers. Several special prizes have been offered for competition, but as yet the articles called for have not been specified. Some discussion has been indulged in as to whether the money donated for a special prize should be offered as money or as a cup or medal of equal value, and the opinions are various.

The matter of badges, which has been stirring the members more than anything else of late, was finally decided by the adoption of a button of white and blue enamel, with St. Louis Florists' Club worked on in gilt letters. The button is of fair size and the lettering can be read distinctly at some distance. This fact has lead several opponents of the button to declare they would not be walking signboards, or something to that effect, and distinctly refuse to wear one. It is unfortunate that everyone cannot be satisfied, but the next best thing is to go with the majority gracefully in matters of this kind, and it is to be hoped that they will be worn by all members during the convention.

Some sample cups were shown, from which to select one to be offered in the bowling contest, but the opinion was that no choice be made until others had been submitted for approval, which will be done at the meeting of the Bowling Club Monday evening.

The supply of flowers has fallen off somewhat during the week and several times there has been a scarcity of good white flowers for funeral work, and it seems that nothing but white flowers will fill the bill, judging from the haste with which other colors are refused. This appears somewhat strange and peculiar, as yellow and even pink and red roses can be used with good effect. Some of the finest work done here has been in colored flowers, and perfect satisfaction has been the result. The contrast presented by the two classes of work as they appeared side by side has been marked and called forth remarks from all praising the originality and fearless, but withal delicate, handling of pronounced colors in this class of work. This fact can be taken advantage of by florists if they feel inclined to break away from the regular stereotyped work that is always seen. It will not only increase their resources, but will enable them to make much better work. R. F. T.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—By two young men used to greenhouses; Denver preferred. State wages, etc. T T, care American Florist.

SITUATION WANTED—By a young man to learn florist business; had some experience; best of references given. Address HARRY GARLAND, Ann Arbor, Mich.

SITUATION WANTED—By a married German; first class florist—commercial or private—13 years' experience. Best of references. Address FLORIST, 1141 E. Mound St., Columbus, O.

SITUATION WANTED—By a competent florist and gardener; married; capable of growing flowers and early vegetables; 15 years' experience. Best of references. Address X. care Joseph Schmidt, 44 North 3rd St., Harrisburg, Pa.

SITUATION WANTED—By a married man on a good private place. Many years experience in all branches of gardening inside and out. Can give good references; 3 years with last employer. Address J J, care American Florist, Chicago.

SITUATION WANTED—By young man; 8 years experience in growing cut flowers and general greenhouse stock, first class designer and decorator. References given. Address G. B. K., care Fred Engel, Farina, Fayette Co., Ill.

SITUATION WANTED—Gardener of executive ability and experience in the management and propagation of all commercial requisites connected with floriculture—ornamental, the nurseries, etc.—wishes situation accordingly. Best of references. Address A Z, care American Florist, Chicago.

WANTED—A young florist (German preferred); general greenhouse work; at once. ED. KIRCHNER, Winona, Minn.

WANTED—Good second hand saddle boiler capable of heating about 1,800 feet of glass. Address ISAAC GILLETT, 1597 8th Ave., West Troy, N. Y.

WANTED—A gardener that can grow fruits and vegetables, that wants an interest in the business. I. L. PILLSBURY, Macomb, Ill.

WANTED—A man that understands growing palms, ferns and smilax plants. Steady employment and fair wages. O. P. BASSETT, Hinsdale, Ill.

WANTED—A first class florist, salesman and maker up. Must be obliging and of good address. Give references and mention wages expected. Address JOHN RECK, Bridgeport, Conn.

WANTED—The Paterson, N. J., Park Commissioners will receive applications for the position of Park superintendent of the two parks of that city. Applications must be in by August 9 and the applicant ready to take charge on September 1, and be able to work from plans and run a propagating house for plants. In answering state wages expected, married or single, how long employed in the business and where last employed.

FOR SALE—No. 3 Hitchings Saddle boiler in first-class condition. Address HENRY CORBETT, Mt. Sterling, Ky.

FOR SALE CHEAP—25 feet of 14-inch smoke stack and 36-inch boiler front. Address McCREA & COLE, Battle Creek, Mich.

FOR SALE OR RENT—Greenhouse; reason, poor health. An A1 chance; 40 miles from Chicago. C. SOUDER, 161 La Salle St., Chicago.

FOR SALE—Hall steam pump and boiler—both new. $115.00 on cars here. Call or address JAS. DAUGHERTY, box 17, Madison, N. J.

FOR SALE—New hotbed sash, Georgia Pine, unglazed, 3x1, primed, f. o. b. $1.00 each. Cash with order. DARLINGTON BROS., Morristown, Tenn.

FOR RENT—Three greenhouses, well stocked, one acre land and dwelling, in finest city in the south. Splendid chance for right party. Address "SOUTH," care American Florist, Chicago.

FOR SALE OR RENT—A well established florist business in western city, doing good business. $500 in cash or good security will secure it. Poor health. Address IOWA, care American Florist.

FOR SALE—The greenhouses, stock and good will of the old established florist business of the late T. C. Ingram. Terms reasonable. Address ALFRED HAMLIN, 1011 St. Louis Ave., Kansas City, Mo.

FOR SALE—Six greenhouses, 6,000 feet of glass, in good condition; winter stock already to put in; horse, wagon and implements included; $1,300 cash; 5 acres of good ground, large house; rent without house $10 per month; 6 miles from heart of city. Must be sold at once. Address ISAAC BRADWAY, 5th and Tabor Sts., Phila.

FOR SALE—My retail florist business at 87 and 89 W. Madison street, Chicago. Completely stocked with supplies and plants. Good horses, wagon and every thing that a first-class store needs. 42 ft. frontage of large show glass. This is no run-down business but one of the best paying in this city. Cause for selling, too much other business. Apply to T. J. CORBREY, 45 Lake St., Florists' Exchange.

FOR RENT OR SALE—In a city of 38,000, a private place (small acre), well stocked, on street car line, one house 50x16, 20 feet high, planted with Asparagus plumosus and smilax, one house for general stock 75x16; dwelling with 7 rooms, good barn; business not overdone. Cut flowers and spring trade very good. Everything new; heated by hot water; just the place for a married man with a small capital. Rent $350 per year for three years. Owner wishes to go traveling. Address C F P, care American Florist, Chicago.

RARE OPPORTUNITY.

On account of poor health I am obliged to sell my florist business. Best location. Opposite cemetery gate. Smartest business city in the state. Cars stop every thirty minutes and make connections with trains to all parts of the United States. One-fourth cash, balance can remain on mortgage. Come and see it. LOUIS R. FOX, 117 E. Fulton St., Gloversville, N. Y.

RARE OPPORTUNITY.

Live business, known over four states as a successful place, elegantly located, five county seat, 21 acres, rich soil, 3 steam greenhouses, 8-room dwelling, large barn, other buildings; own gas well, no cost for fuel; own water works, choice fruits. Good reasons. Will trade for improved farm. Particulars cost nothing; write. **Barnes' Garden**, box 885, Independence, Kans.

FOR SALE OR RENT.

Rose and cut flower growing plant containing about 35,000 square feet of glass; houses heated by steam and hot water; all in good condition; well stocked with roses, ferns, palms, etc. Only 18 minutes ride from center of city. If you mean business, address **FLORIST**, care Chas. E. Prather, Louisville, Ky.

FOR SALE.

WEATHERED BOILER No. 5; 900 feet 4-inch pipe.
GLASS, 500 square feet, 16x24 double.
POTS, 8,000 2¼-inch Standard, Whilldin make. 800 6-inch. Write for prices.

S. B. FIELD, Roselle, N. J.

FOR SALE—HALF COST.

Three greenhouses 50x12 each, built in '88, on large lot in town, with 28 sashes, new; frames, tools, pots, large winter select stock of carnations, bouvardias, violets, chrysanthemums, asters, etc., etc.; heated with Meyers' new hot water boiler; good local trade in town of 4,000; new depot, 6½ miles from Phila.; 1 year established stand in largest market in Phila. Party has business in Scotland. $1,000—$800 down, rest on mortgage. **FLORIST**, care Moore & Simon, 149 N. 4th St., Phila.

FOR SALE OR TO RENT.

The following greenhouse property, situated on the outskirts of Springfield, the City of Houses; or will sell Greenhouses, Stock and Fixtures and give ten years' lease of 2 acres land. Ten houses in all—5 houses, 10 feet wide, 65 feet long; 4 houses, 18 feet wide, 65 feet long; 1 house, 18 feet wide, 65 feet long. Steam plant! New double Florida Boiler. Stock in good condition, with a large and extra good home market. This is an opportunity in a life-time, as present owner has other interests to look after. If you are looking for a chance, apply at once to

N. D. WINTER,
5 Elm Street, SPRINGFIELD, MASS.

BRIDESMAID.

Fine 3-inch plants at $9.00 per 100. Planters need have no fear of this rose sharing the fate of Waban, as it has proved itself a first-class rose. Some of the larger growers are planting it freely.

Meteor, Perle, Sunset, Gontier, Mermet, Bride, Hoste, Cusin, and other forcing Roses now ready for planting, from 3-inch pots at usual prices.

M. A. HUNT, Terre Haute, Ind.

H. P. ROSES,

FOR FORCING.

LEADING VARIETIES.

Order Now.

READY FOR SHIPMENT OCTOBER 1st.

Superb plants on own roots and budded on Manetti. General Descriptive Catalogue, also Wholesale Catalogue free.

Ellwanger & Barry,

Mount Hope Nurseries, ROCHESTER, N. Y.

SOME ROSES.

		2½-inch.	3-inch
PERLES	Per 100	$4 50	$7 00
METEOR, extra	"	5 00	8 00
MERMETS	"	4 00	7 00
BRIDE	"	4 00	7.00
LA FRANCE	"	4 00	
ALBANY	"	4 00	

BROWN & CANFIELD,

SPRINGFIELD, ILL.

GOING.

Please write, stating just how many

BRIDESMAIDS

you wish, and I will quote you a bargain.

FRANK L. MOORE,

. . . CHATHAM, NEW JERSEY.

Hybrid Perpetual Roses,

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.

Price Lists to applicants. Address

WILLIAM H. SPOONER,

JAMAICA PLAIN, (Boston), MASS.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST. . . . . .

ANCHORAGE ROSE CO., Anchorage, Ky.

ROSES,

STRONG PLANTS,

WRITE FOR PRICES.

Kemble Floral Co.,

OSKALOOSA, IOWA.

ROSES. ROSES.

STRONG FIELD GROWN PLANTS; VARIETIES SUITABLE FOR FLORISTS' USE. LARGELY

GEN. JACQUEMINOT, MRS. J. H. LAING, ULRICH BRUNNER, MAGNA CHARTA, Pr. CAMILLE DE ROHAN, PAUL NEYRON, MARSHALL P. WILDER, ANNA DE DIESBACH, ALFRED COLOMB, ETC., ETC.

A FULL ASSORTMENT OF MOSS AND HARDY CLIMBERS.

TREE ROSES.

A splendid stock, fine smooth bodies, strong two year heads.

Our usual complete assortment of Trees, Shrubs, Bulbs, Plants, Etc.

CORRESPONDENCE AND INSPECTION INVITED.

THE STORRS & HARRISON CO.,

PAINESVILLE, OHIO.

30,000 FIRST QUALITY FORCING ROSES.

READY FOR IMMEDIATE PLANTING.

Fully equal to those sold last year, and perfectly healthy in every respect.

LA FRANCE, 3-inch pots, $9.00 per hundred; 4-inch pots, $12.00 per hundred.

SOUV. DE WOOTTON, MERMET, BON SILENE, MME. HOSTE, PERLE DES JARDINS, BRIDE, SAFRANO, MME. CUSIN, 3-inch pots, $7.00 per 100; 4-inch pots, $10.00 per 100.

SMILAX. Strong plants, 2½-inch pots, $2.50 per hundred; $20.00 per thousand.

J. L. DILLON, Bloomsburg, Pa.

FORCING ROSES.

Good stock . . . 3 AND 4-INCH POTS.

AMERICAN BEAUTY, BRIDE, MERMET, BRIDESMAID, METEOR, PERLE, SUNSET, GONTIER, LA FRANCE. . . . . .

A. S. MacBEAN, Lakewood, New Jersey.

ROSES.

Fine healthy stock. Per 100 P. 1000

Perles, Mermets, The Bride, Sunset, Papa Gontier, Niphetos, Bon silene, La France, Souv. d'un Ami, Duchess of Albany, Mad. Cusin, Mad. de Watteville, from 3-in. pots, $8.00 $75.00

SMILAX, from 2½-inch pots..... 2.50 20.00

Lots of other Fine Stock.

Send for new list.

WOOD BROTHERS,

Fishkill, N. Y.

Mention American Florist.

ROSES.

TEAS . . . . . $30.00 per 1000

HYBRIDS . . . . . 40.00 per 1000

Healthy plants, in 2-inch pots.

Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.

Trade list on application.

Jacob Schulz,

LOUISVILLE, KY.

Mention the American Florist when writing to advertisers on this page.

ROSES.

LA FRANCE, BRIDES, MERMETS, AND PERLES,

Strong, 3-inch pots, at $7.00 per 100.

LA FRANCE and ALBANY, from 2-inch pots at $4.00 per 100.

The above is good, clean stock, ready for planting.

ROBERT F. TESSON,

West Forest Park, ST. LOUIS, MO.

ROSES.

GOOD HEALTHY STOCK FOR FORCING.

		2½-inch.	3-inch.
BRIDES	per 100	$4.00	$7.00
MERMETS	"	4.00	7.00
PERLES	"		7.00

FOSTORIA FLORAL CO., Fostoria, O.

Send for a Copy OF OUR

TRADE DIRECTORY

AND REFERENCE BOOK.

PRICE $2.00.

AMERICAN FLORIST CO.,

P. O. Drawer 164. CHICAGO, ILL.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

Our Annual Convention Number.

In our Convention Number for 1893, which will also be a Columbian Souvenir as well, we shall repeat the plan of identification by portraits as inaugurated at the Convention in Washington last August. This plan solved the identification problem with such general satisfaction and was so generally made use of that we believe no explanation of its workings is now necessary.

Are you a member of the Society of American Florists? If so, do you expect to be present at the Convention in St. Louis next August? If not now a member do you expect to join while at the St. Louis meeting? If so, and you were not represented among the portraits given in our Convention Number of 1892, please send us a cabinet size photograph of yourself, being careful to write your name and address plainly on back of same. If you have no recent photograph, have one taken now, and send us a copy as soon as ready. If you intend to take your wife with you to the convention (and you ought to do so if possible) send us a copy of her photograph also, as our identification plan includes the ladies too. But do not send us photographs that must be returned. We have to cut them to get them into groups and of course the photos are spoiled thereby.

This number will contain in addition to the portraits and indexes to same, a complete guide, *at date*, to the Horticultural Department of the World's Columbian Exposition at Chicago, which will certainly be visited by all members of the Convention after the adjournment of the St. Louis meeting. Diagrams of each section of the Horticultural display will be given and the location of each exhibit plainly indicated so it may be quickly located by any one. These will be accompanied by an alphabetical index to exhibitors and a classified list of exhibits, each referring to position on the diagrams; together with fine half tone plates of special features.

Full details regarding the great Horticultural Congress will also be given in this number, and it will be such a "Columbian Souvenir" as you will want to preserve for all time.

THIS is *last call* for photos for our convention number. All must be in hand by the 24th inst. at the very latest to be in time. We shall be unable to use any received after that date. If yours is not already mailed send it *at once*.

EBERHART'S ECONOMIC ENTOMOLOGY, recently received by us, is a very useful little handbook of insects injurious to vegetation and the means of checking their ravages. It is simply written and will be found useful by any one cultivating field or garden plants. Bound in stiff paper, 108 pages, copiously illustrated (Price 50 cents, A. Flanagan, Chicago).

ONTARIO has issued a neatly printed catalogue of her floricultural exhibit at the World's Fair that will certainly do much to enhance the educational value of its display. It has also published similar catalogues of its displays in other departments.

WHEN SENDING US newspapers containing items you wish us to note please do not fail to distinctly mark the item so it can be easily found, as we can not spare the time to hunt through the mass of papers sent us for unmarked items.

DO YOU WANT an alphabetical list of the chrysanthemums in commerce in America, with class and a brief accurate description of each one, and synonyms noted? You will find such a list in our trade directory and reference book.

WE request subscribers to make remittance by draft or money order when renewing subscriptions, and to keep a record of the numbers and dates of same. This is to guard against losses in the mails.

WHEN YOU arrive in Chicago make it a point to at once register your name and hotel in the book kept for the purpose at the headquarters of the Chicago Florist Club, 45 Lake st.

LILY BLOOMS.

We will have a good supply continually for three months. Auratum, Lancifolium, Album and Roseum. They ship well. **Also pink and lavender Sweet Peas.**

WISCONSIN FLOWER EXCHANGE,
131 Mason St., Milwaukee, Wis.

FLORAL DESIGNS

The Cut Flower Worker's Friend. Fine book of 160 pages. Send $3 50 for it, to
J. HORACE McFARLAND, Harrisburg, Pa.

CUT SMILAX,

15 cts. per string till November 1st. Quality first-class. Special attention to orders by wire.
J. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

When writing to any of the advertisers on this page please mention the American Florist.

WHOLESALE FLORISTS

La Roche & Stahl

N. E. CORNER
13th & Chestnut Sts.,
PHILADELPHIA.

SAMUEL S. PENNOCK,
Wholesale Florist
REMOVED TO REAR OF 42 S. 16th ST.,
Philadelphia, Pa.

We are the People!
Who? KOFFMAN,
Where? WALDEN, Orange Co., N. Y.
What? SMILAX
25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.
When? ALL THE YEAR AROUND.
Also Adiantum Cuneatum Fronds At $1.25 per 100.
And he pays the Express.

HARDY CUT FERNS
LAUREL FESTOONING, ETC.
The only place in the world where you can **Always** get them,
H. E. Hartford,
18 Chapman Place, BOSTON, MASS.

DO YOU USE FERNS?
Finest and Cleanest in the Land.
Hardy Dagger Cut $1 per 1000.
G. W. CURREY & CO.
Give us a trial NASHVILLE, TENN.

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

THEY SAY That **ASPARAGUS PLUMOSUS NANUS**
at 50 cents a string, 8 to 12 feet in length, is the cheapest and best material for decorating, as it will stand longer and look better than any other green in this hot weather.
ORDER IN LARGE OR SMALL QUANTITIES, FROM
W. H. ELLIOTT, Brighton, Mass.

Summer * Buds.
BRIDES AND MERMETS, 4 CENTS; PERLES, 3 CENTS. FIRST-CLASS STOCK.
Sample sent on application. Telegraph and Telephone connections with all parts of U. S.
ANCHORAGE ROSE CO., Anchorage, Ky.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.

	Per 100
Perle, Niphetos, Gontier	$2.00@$3.00
Brides, Mermets, La France	3.00@ 4.00
Meteors	5.00
Carnations, short	.50
" long	1.00
Adiantum	1.00
Valley	3.00
Smilax	12.50@16.00

Ferns, common, 30c. per 100; $2.50 per 1000.

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
126 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.; Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange,
45 Lake St., CHICAGO.

M. OLSON,
Wholesale FLORIST,
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY,
Wholesale and Commission
FLORIST,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

A. G. PRINCE & CO.,
Wholesale and Commission
FLORISTS,
45 LAKE STREET,
In Chicago Cut Flower Exchange. CHICAGO.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES, LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

Wholesale Market.

Cut Flowers.

NEW YORK, July 18.

Roses	1.00@ 3.00
" Beauty	5.00@15.00
Carnations	.25@ 1.00
Valley	3.00@ 4.00
Longiflorum lilies	1.00
Sweet Peas, per 100 bunches	.50
Adiantums	1.00
Smilax	12.00@15.00

BOSTON, July 18.

Roses	3.00@ 4.00
Carnations	.50@ 1.00
Lily of the valley	4.00
Peas	.05@ .10
Candidums	2.00
Candytuft, coreopsis	.50
Cornflower, Gypsophila	.50
Adiantum	1.00
Smilax	12.50
Asparagus plumosus	50.00

PHILADELPHIA, July 18.

Roses	2.00@ 3.00
" Beauties	15.00@20.00
Carnations	.75@ 1.00
Asters	1.00
Sweet peas	.25@ .30
Gladiolus	5.00
Valley	4.00
Pond lilies	.50
White hollyhocks	.75@ 1.00
Balsams	.25@ .50
Adiantum	.75@ 1.00
Smilax	15.00
Asparagus	50.00

CHICAGO, July 18.

Roses, Perles, Guillot, Niphetos	2.00@ 5.00
" Albany, Bride	3.00@ 4.00
" Meteor	5.00
" Beauties	8.00@10.00
Carnations	.50@ 1.00
Sweet Peas	.15@ .25
Auratum	8.00@10.00
Gladiolus, longiflorum	6.00@ 8.00
Cornflowers	.20
Smilax	12.00@15.00

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

WHOLESALE FLORISTS,
JOBBERS IN . . .
. . FLORISTS' SUPPLIES,
FLORISTS' VASES.
METS, BRIDES, GONTIERS, CARNATIONS, ALWAYS ON HAND.
1 Music Hall Place,
BOSTON, MASS.
HORTICULTURAL AUCTIONEERS. . .
Mention American Florist

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., BOSTON, MASS.
Mention American Florist.

SEND FOR A COPY
OF OUR
TRADE DIRECTORY
AMERICAN FLORIST CO., CHICAGO

When writing to any of the advertisers on this page please mention the American Florist.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
17 WEST 28TH STREET,
NEW YORK.
BRANCH: Cut Flower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . . NEW YORK.
THE FINEST ROSES AND CARNATIONS.
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE
FLORIST,
1122 PINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STEET,
St. Louis, Mo.

Cricket.

The Sherwood Hall Nursery Cricket Team, of Menlo Park, Cal., played a cricket match with the San Jose "Wanderers" on the 2nd inst., at their grounds near Palo Alto. A most successful game was played. The visiting "Wanderers" were most hospitably treated to refreshments under the magnificent oaks. An enjoyable time was had by all. The gardeners of Sherwood Hall are putting themselves to the fore as cricket players.
SEC'Y.

PATERSON, N. J.—John R. Johnson who has been superintendent of the parks for the past year has announced his intention to resign. The city will lose a good man in Mr. Johnson, for the parks have shown a wonderful improvement under his care.

NEW BRITAIN, CONN.—Steele Bros, florists, lost a barn, horse, several carriages and a lot of tools by fire on June 30. Loss $2,000 with but small insurance.

Freesia refr. alba.

READY NOW. Samples mailed free.

	Per 100	Per 1000
SELECT BULBS	$ .75	$5.00
EXTRA SELECT BULBS	1.00	8.50

W. W. BARNARD & CO.,
6 and 8 North Clark Street, CHICAGO.

We make special import prices on
ROMANS, LILIUM HARRISII, NARCISSUS, HYACINTHS, TULIPS, VALLEY PIPS, and all other FORCING BULBS. . . . . .
Let us know your wants and get our prices.
Mention American Florist.

SEND for Catalogue of
JAPAN BULBS, SEEDS and SHRUBS, ARAUCARIAS, TREE FERNS, AUSTRALIAN PALM SEEDS, CALIFORIA BULBS and SEEDS to
H. H. BERGER & CO.,
Established 1878. SAN FRANCISCO, CAL.

We Sell Bulbs!
Special Prices on Application.
Weeber & Don
Seed Merchants and Growers,
114 Chambers St., NEW YORK.

G. J. MOFFATT,
Manufacturer of
PAPER BAGS AND ENVELOPES
Special attention given to
Seed Bags and Catalogue Envelopes.
NEW HAVEN, CONN.
Mention American Florist.

Columbia Farm,
ST. GEORGES, BERMUDA.
The undersigned solicits offers for about 100 lbs. Freesia Seed (R. alba), for the whole, or in lots of 10 lbs. Also a few early white Roman Hyacinths, Gladiolus, Calla, Chinese Sacred Lily, Amaryllis Johnsonii bulbs and Canna roots; choice varieties. June and July delivery.
R. H. JAMES,
Grower and Exporter of Bermuda Bulbs.

LILIUM HARRISII.
Original and largest growers of this important bulb.
OUR SPECIALTY!
True Stock. Lowest Prices. Best Quality.
F. R. PIERSON CO.,
TARRYTOWN-ON-HUDSON, NEW YORK.

VAUGHAN GETS THERE!

JUST RECEIVED.

First early shipment of Fall Bulbs in this country, consisting of
ROMAN HYACINTHS, P. W. NARCISSUS, ORNITHOGALUM, and OTHER FRENCH BULBS. CHINESE NARCISSUS.
Write for prices.
IF YOU WANT L. HARRISII EARLY, ORDER NOW.
Vaughan's Seed Store,
148 W. Washington St., CHICAGO. 26 Barclay St., NEW YORK.

GT. VAN WAVEREN & KRUYFF,
GROWERS OF
Hyacinths, Tulips, Crocus, Daffodils,
LILIES, ETC., ETC.
SASSENHEIM, Haarlem, HOLLAND.
ESTABLISHED 1866.

SELECT PANSY SEED
Trade Pkts., 500 Seeds Each.

	Per Pkt.		Per Pkt.
Bugnot,	24c	Giant Five Spot,	45c
Cardinal,	40c	Giant Trimardeau Mix,	15c
Cassier's Giant,	24c	Gold Margined,	10c
Delicata,	10c	King of the Blacks,	10c
Dark Purple,	10c	Light Blue,	10c
Deep Indigo Blue,	10c	Lord Beaconsfield,	10c
Emperor William,	10c	Pelargoniflora,	12c
English Face,	12c	Prince Bismark,	12c
Fawn Color,	10c	Pure Yellow,	10c
Fire King,	24c	Quadricolor,	10c
Giant Black,	40c	Red Victoria,	30c
Giant Beaconsfield,	40c	Rose Marbled,	10c
Giant Pure Gold,	40c	Rosy Morn,	24c
Giant Striped,	45c	Striped and Mottled,	10c
Giant Purple,	40c	Snow Queen,	10c
Giant Three Spot,	40c	Violet Margined White,	10c

BARGAIN OFFER! To introduce my seeds to florists, I will send one trade packet each of the 32 VARIETIES total 16,000 seeds, (equal ¼ oz.) by mail, registered for $5.00
DON'T BUY MIXED PANSY SEEDS when you can purchase in separate colors at the same price and know just exactly what you are planting. Give me a trial order. Satisfaction guaranteed.
MISS C. H. LIPPINCOTT, Grower and Dealer in Flower Seeds Exclusively, 828 Sixth Street So., MINNEAPOLIS, MINN.

HULSEBOSCH BROS.,
BULB AND PLANT GROWERS,
OVERVEEN, near Haarlem, HOLLAND

	Per 100	1000
Lilium Harrisii, 4 to 5-inch in circ.	$2.20	$19.00
" " 5 to 7-inch in circ.	3.00	24.00
" " 7 to 9-inch in circ	5.25	47.00
" " 9 to 12-inch in circ.	11.00	100.00
Lilium Longiflorum 10 per cent denser than Lilium Harrisii.		
Roman Hyacinths, extra selected	2.50	22.00
" " top roots	3.00	25.00
Narcis. Totus Albus, extra selected	1.00	7.50
" " " Grandiflor'm, ext. sl'c'd	1.50	11.00

Full Wholesale Catalogue now ready. Address
A. HULSEBOSCH,
P. O. Box 3118. Warehouse 58 West Street, NEW YORK CITY.

ONION SEED
OUR SPECIALTY.
Grown from selected Onions and the purest stock in the United States.
1893 CROP 1893
Yellow Globe Danvers, Yellow Flat Danvers, Extra Early Red, Wethersfield. } Write for Prices.
COX SEED AND PLANT CO.
SAN FRANCISCO, CAL.

Write for Wholesale List.
MICHEL PLANT AND BULB CO.,
ST. LOUIS, MO.

FIELD GROWN CARNATIONS.

Fine healthy plants for **Winter Bloom.**

W. R. SHELMIRE,
CHESTER CO., AVONDALE, PA.
Send for Circular.

CARNATIONS

Rooted Cuttings all sold or planted out.

FIELD GROWN PLANTS IN SEASON.

Correspondence Solicited.
C. J. PENNOCK, THE PINES,
Chester Co., KENNETT SQUARE, PA.

CARNATIONS

ROOTED CUTTINGS

of all the leading varieties. Will be ready January 1, 1893.

R. T. LOMBARD, Wayland, Mass.

CARNATIONS.

A SPECIALTY.

Full stock of all the new and leading varieties. Rooted Cuttings, Young Plants, and Field Grown Plants in season. Get our prices before purchasing.

GEO. HANCOCK,
GRAND HAVEN, MICH.

Phœnix rupicola.

This useful and beautiful Date Palm in **EXTRA FINE PLANTS**, growing in from 7 to 10-inch pots, from $3.50 to $7.50 each, according to size.

EDWIN LONSDALE, Wyndmoor,
STATION "G," (Chestnut Hill P. O.) PHILADELPHIA.

TRY **DREER'S GARDEN SEEDS,**
Plants, Bulbs & Requisites. They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.
HENRY A. DREER,
Philadelphia, Pa.

P. SEBIRE & SONS,

Nurserymen, USSY, Calvados, FRANCE.

A general assortment of Fruit Tree Stocks, such as Apple, Pear, Myrobolan Plum, Mahaleb and Mazzard Cherry, Angers Quince, Small Evergreens, Forest Trees, Ornamental Shrubs, Roses, etc. The largest stock in the country. Prices very low. Packing secured. Catalogue free. Send for quotations before placing your order elsewhere. Agents for U. S. America and Canada.

C. C. ABEL & CO., P. O Box 920, New York.

Always mention the American Florist when writing to advertisers.

PANSIES.

THE BEST ARE THE CHEAPEST.

SIZE is a strong point in Pansies; when you combine size, color, substance and form they are pretty near right. By careful hybridization and selection I have accomplished this, and the Pansies I send out this Fall will be an agreeable surprise, even to former customers. If you buy Pansies I would be pleased to correspond with you; they will be offered for sale from Aug. 20th to Dec. 1st, at 75c. per 100 or $5 per 1000. Terms cash with order or C. O. D. No seed for sale.

L. B. 496. **ALBERT M. HERR, LANCASTER, PA.**

THE TOTTENHAM NURSERIES Lt'd, DEDEMSVAART, HOLLAND.

(OLD FIRM A. M. C. JONGKIND CONINCK)

Hardy home-grown bulbs and flower roots, herbaceous plants, ferns, hydrangeas, aquatics, young fruit trees, rhododendrons, conifers, etc. for fall importation. Catalogue free on application to their sole agents,
C. C. ABEL & CO., P. O. Box 920, New York.

Premium American PANSY • SEEDS.

New Crop.

Grown by WM. TOOLE, Baraboo, Wisconsin, has the largest collection in America.

"GUIDE TO PANSY CULTURE."

with catalogue describing 82 varieties and mixtures. Extra choice mixed 10c pkt.; trade pkt. 20c; ⅛-oz. 50c. Selected mixed, pkt. 15c; trade pkt. 30c; ⅛-oz. 75c.

HESPERIAN PANSIES, pkt. 25c; trade pkt. 50c.

WM. TOOLE, Pansy Specialist,
BARABOO, WISCONSIN.

ROEMER'S SUPERB PRIZE PANSIES

The finest strain of Pansies in the World.

Introducer and Grower of all the leading Novelties.

Catalogue free on application.

FRED. ROEMER, SEED GROWER,
QUEDLINBURG, GERMANY.

PANSIES.

During the season we shall have plants of best German strain of Pansies, at lowest prices.

BRAUER & RICHTER,
McCONNELSVILLE, OHIO.

PANSIES.

Fresh Seed of my carefully selected strain of Pansies. Trade pkt. (1000 seeds), 50c. Plants ready in September.

ADOLF STAHL, Johnstown, Pa.

Association "Flora"

BOSKOOP, HOLLAND

NURSERIES.

Roses, Clematis, Shrubs, Azaleas, Palms, Herbaceous Plants, Bulbs, Etc.

Catalogue on Application.

P. OUWERKERK,
206 Cambridge Ave., JERSEY CITY, N. J.

Vaughan's Solid Steel Trowel.

THE BEST IN THE WORLD. NEVER WEARS OUT.

Price, 50c.; by mail, 60c.

VAUGHAN'S SEED STORE,
NEW YORK, 26 Barclay Street. CHICAGO, P. O. Box 688.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

ZIRNGIEBEL'S Giant Market and Giant Fancy PANSIES,

are without question the most popular strains in cultivation up to date.

New Seed ready now, in trade packages of either strain, at one dollar each.

Denys Zirngiebel,
NEEDHAM, MASS.

PANSY SEED. PANSY

The Jennings strain of large flowering and Fancy Pansies, new crop now ready. 8 pounds of seed and over 500,000 plants were sold last season. This strain is popular, and why? Because Florists can depend on getting only First Class Stock. I shall sell no other. My aim is to supply the best Finest Mixed, all colors, trade pkt. 300 seeds 25c.; 1000 seeds 50c.; 2000 seeds $1.00; per ounce $8.00. Pure White (the finest) trade pkt. 50c. and $1.00; Golden Yellow, dark eye, trade pkt. 50c. and $1.00. Send for price list for other varieties. Pansy Plants, ready September 1 to December 25, any size wanted, cold frame size (5c. per 100) by mail; $5.00 per 1000 by express; 5,000 $20. Large flowering plants $1.00 per 100; $8.00 per 1000. Cash with order.

ADDRESS **E. B. JENNINGS,**
WHOLESALE PANSY GROWER,
Lock box 254 SOUTHPORT, CONN.

EXTRA PANSY SEED.

Mammoth Sunbeam Strain.

A grand collection of giant flowering varieties, very large, of perfect form, and choice colors; carefully selected; receive high praise from my customers; better than ever; no finer strain offered anywhere. Every florist should sow of it. Trade pkt., 500 seeds, 25 cts.; 3 pkts. 60 cts.; 6 pkts. $1.00.

JOHN F. RUPP, Shiremanstown, Pa.

ROSES

For Forcing.

PERLES, BRIDES, LA FRANCE, etc.

per 100, $5.00; per 1000, $45 00.

Special C. SOUPERT, 2½-inch, per 100 $3.50; 3½-inch, per 100 $8.00. Fine stuff.

ROMANS, HARRISII and FREESIA BULBS are now ready.

VAUGHAN'S International Pansy Mixture, ready August 1, is a World Beater.

J. C. VAUGHAN,
146 & 148 West Washington Street, CHICAGO.

GREENHOUSE HEATING.

BY A. B. FOWLER.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.

It is highly commended by Mr. John Thorpe and others. Postpaid, 75c.

Sent on receipt of price. Address,
AMERICAN FLORIST,
CHICAGO.

Root Cuttings of Tecoma (Bignonia) Grandiflora.

Your Philadelphia correspondent makes a singular statement in his letter in your issue of July 6. He says "Bignonia grandiflora seems to be a branch variation of Bignonia radicans, as cuttings from the branches will come true, while root cuttings from the same plant will produce only radicans."

I am not aware that a sport cannot be increased by its root as well as by any other portion of it. Are not many of the sports of bouvardias increased in this way? At any rate Tecoma (Bignonia) grandiflora is a distinct species. Here in Germantown it has long been in cultivation under the name of the Chinese trumpet vine, and looking at Nicholson's Dictionary to-day, I see he says of it that it is from Japan and China. Radicans is a native of this state and southward. Furthermore we have many plants of it, all raised from roots, and all true, as their flowering at different times has proved.

It is likely that your correspondent's experience, has been, unknowingly, with a grafted plant, and the root was really radicans. We do not graft our plants, but others may do so, as grandiflora is not the rampant grower radicans is.

JOSEPH MEEHAN.
Germantown Nurseries, Phila.

SANDUSKY, O.—Miss Louise, daughter of Henry Matern, the florist, was married July 1, to Charles L. Ferguson, of Lorain, Ohio.

GALENA, ILL.—B. F. Vandervate has purchased his father's interest in the business and will continue the same under his own name. He is now building two new houses 16x80 and is rebuilding the old ones adding on the latest improvements.

PREPARE NOW FOR OUR CONVENTION NUMBER AND COLUMBIAN SOUVENIR.

C. STOLDT,
CYCLAMEN GROWER,
WANDSBEK-MARIENTHAL, near Hamburg, GERMANY.
Offers CYCLAMEN SEED, STOLDT'S HYBRIDS. First-class seed, are acknowledged to be unsurpassed by all authorities in Europe, at the following prices, including postage:
Bright dark red.....per 100 corms, 50 cts.
Rose of Marienthal..... " " 50 cts.
Katchen Stoldt, pure white " " 75 cts.
White, with carmine eye.. " " 35 cts.
CASH WITH ORDERS.

SMILAX.
A large stock of strong well grown plants from 2¼-inch pots, at $2.00 per 100; $18.00 per 1000.
PANSY PLANTS for fall. Choicest strains.
CYCLAMENS, both 1 and 2 year bulbs. Prices on application.
CLEMATIS, large flowering, for fall delivery. A very large stock and assortment. Write for prices. I can suit you both on plants and prices.
F. A. BALLER, Bloomington, Ill.

You Must be Thinking
Now about the pot-grown Strawberry Plants you will need for your trade this summer. We will have them in leading varieties after July 1, at $18.00 per 1000. $15.00 in large orders. We can ship at once. NO WAITING.
Rogers' Nurseries, Oldest in the State Moorestown, N. J.

Siebrecht & Wadley,
ROSE HILL NURSERIES,
NEW ROCHELLE, N. Y.
Palms, ORCHIDS Roses, and New Plants.
FRESH DRACAENA CANES NOW READY.

ORCHIDS.
The Finest Stock in the World.
SANDER'S, ST. ALBANS, ENGLAND.
Thirty minutes from London.
Our Mr. A Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City

Established and Imported
ORCHIDS.
Ig. FORSTERMAN,
Newtown, N. Y.

WHY NOT TRY
A FEW ORCHIDS?
They are Very Cheap. They are Easily Grown. They Sell Well.
They always attract attention in store or greenhouse.
BRACKENRIDGE & CO.,
304 W. Madison St., BALTIMORE, MD.

MARIE LOUISE VIOLETS
Field grown plants. Fine stock.
PER HUNDRED.....$10.00
PER THOUSAND..... 80.00
500 at 1000 rate.
C. R. KNAPP,
P. O. box 62. NEW HAMBURGH, N. Y.

SMILAX.
First-class, from 2½-inch pots, $2 50 per 100; $20 00 per 1000. Sample free.
Address J. G. Burrow, FISHKILL, N. Y.

SMILAX PLANTS CHEAP.
For the month of July only.
In order to make room I offer extra fine strong SMILAX PLANTS, out of 2-inch pots, for $12 50 per 1000, (500 at 1000 rate); $1.50 per 100. Terms strictly Cash. Plants will be packed light, and satisfaction guaranteed. Samples will be sent on receipt of 10c. stamps.
FRED SCHNEIDER, Wholesale Florist, Wyoming County, ATTICA, N. Y.

WATER HYACINTHS.
$1.00 a dozen; $4.00 a hundred.
WATER POPPIES, 75 cts. a dozen.
MRS. A. E. DAVIDSON, Terry, Hinds Co., Miss.

Mention the American Florist when writing to advertisers on this page.

Chrysanthemums.
Best for florists' use. New of 1892.
HARRY BALSLEY, EDWARD HATCH, GEO. W. CHILDS, MRS. ROBT. CRAIG, MR. HICKS ARNOLD, JOHN H. TAYLOR, ROSLYN, } Per 100, $5.00.
100 plants, 10 to 20 choice standard varieties, our selection, $3.00.
100 plants, best of '92 and standard sorts in equal quantity, our selection, $4.00.
Miss Kate Brown, new early white, per 100 $5.00.

NIVEUS.
The grand prize winner of the year, per dozen $4.00; per 100 $25.00.
Prices of other new varieties on application.
Address NATHAN SMITH & SON, 167 W. Maumee St., ADRIAN, MICH.

CATALOGUE PRINTING. ELECTROTYPING.
Done with expert ability for Florists, Nurserymen, Seedsmen. Write to
J. Horace McFarland Co., HARRISBURG, PA.

E. G. HILL & CO.,
Wholesale Florists
RICHMOND, INDIANA.

Swainsona galegifolia alba.
Nice young plants in 2¼in. pots, $3.00 per dozen. STOCK LIMITED.
EDWIN LONSDALE,
WYNDMOOR, near Chestnut Hill, PHILADELPHIA.
Money Order Office, Station "G," Phila.

HEADQUARTERS for WATER LILIES
SEEDS, TUBERS AND PLANTS, ready for shipment at all seasons and to all parts of the world. Don't fail to inspect our Columbian Exhibit at the World's Fair.
Illustrated Catalogue on application.
WM. TRICKER, DONGAN HILLS NEW YORK.

FOR SALE.
THE CUTS
USED IN ILLUSTRATING THIS PAPER.
Write for prices on any which you have seen in previous issues and would like.
AMERICAN FLORIST CO.
CHICAGO.

Cape Flowers, new crop in best white quality at $1.00 the lb.; 10 lb. lots, $9 net.

Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 28-in. upwards, at 40c., 45c., 50c., 60c., 75c. and $1.00 each, according to length.

Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.

Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.

Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc. For prices consult our

Trade Catalogue, mailed free.

August Rolker & Sons,
136 & 138 W. 24th St., P. O. Station E. **New York.**

H. BAYERSDORFER & CO.,
WHOLESALE
FLORISTS' SUPPLIES ONLY,
56 N. 4th Street,
PHILADELPHIA, PA.
Our new Catalogue is now out, free upon application.

MARSCHUETZ & CO.,
Florists' Supplies,
23 & 25 N. 4th St., PHILADELPHIA, PA.
Send for Catalogue.

ERNST KAUFMANN & CO.,
Florists' Supplies,
113 NORTH 4TH STREET,
PHILADELPHIA, PA.

WHITE DOVES
FOR FLORISTS.
Largest and finest stock in the United States. Write for prices to
S. J. RUSSELL,
850 Montgomery St., Jersey City, N. J.

FOR SALE BY Messrs. F. E. McAllister, A. Herrmann, N. Steffens and Reed & Keller, New York; W. C. Krick, Brooklyn, N. Y.; H. Bayersdorfer & Co., Ernst Kaufmann and Marschuetz & Co., Philadelphia, Pa.; C. Ritsam & Sons, Trenton, N. J.; J. M. McCullough's Sons and B. P. Critchell & Co., Cincinnati, O.; J. C. Vaughan, Chicago, Ill.; Wisconsin Flower Exchange and Currie Bros., Milwaukee, Wis.; C. A. Kuehn, S. Mount & Co., C. Young & Sons Co., Wm. Ellison and Jordan Floral Co., St. Louis, Mo.; Ed. S. Schmid, Washington, D. C.; G. W. Currey & Co. and Eckhardt & Co., Nashville, Tenn.; T. W. Wood & Sons, Richmond, Va.; U. J. Virgin, New Orleans, La.; D. B. Long, Buffalo, N. Y.; J. A. Simmers, Toronto, Ont.

Celery Plants.
2,000,000 WHITE PLUME, $1.25 per 1,000. Cash with order. Samples mailed free upon application.
C. M. GROSSMAN, Wolcottville, Ind.

Always mention the American Florist when writing to advertisers.

PLANTS OF
Asparagus plumosus
STRONG 3-YEAR OLD ROOTS.
Just the kind for making strings in a hurry. Large enough to divide up and still have big plants.
$10.00 PER DOZEN; $75.00 PER HUNDRED.
JOHN BURTON, Chestnut Hill, Philadelphia.

HOW TO GROW CUT FLOWERS.
A PRACTICAL TREATISE ON
THE CULTIVATION OF THE ROSE,
And Other Flowering Plants for Cut Flowers, sent to any address upon receipt of $2.00. M. A. HUNT, Terre Haute, Ind.

W. C. KRICK'S
PATENT
Florists' Letters, Etc.
Highest Award wherever exhibited.
These Letters are made of the best immortelles, wired on wood or metal frames having holes drilled in them to insert toothpicks, by which to fasten them in the design. All infringements prosecuted.
2-inch Letters, $3 00 per 100.
Postage, 15c. per 100.
Before purchasing send for free sample and Catalogue and compare with any other letter in the market.
W. C. KRICK, 1287 Broadway, BROOKLYN, N. Y.
Agents:—J. C. VAUGHAN, Chicago, Ill.; H. BAYERSDORFER & Co., Phila., Pa.; N. STEFFENS, N. Y.; AUG. BOLKER & SONS, N. Y.; ED. S. SCHMID, Washington, D. C.; JAMES VICK'S SONS, Rochester, N. Y.; T. W. WOOD & SONS, Richmond, Va.; J. A. SIMMERS, Toronto, Ont.

BOSTON FLORIST LETTER CO.,
13 Green Street, BOSTON, MASS.
Address all correspondence to 1 Music Hall Place.
Manufacture THE BEST LETTERS IN THE MARKET.
Sizes 1½-inch and 2-inch, $2.00 per 100. Patent fastener with each letter.
With orders for 500 letters we give away a nicely stained and varnished box. See cut in next week's American Florist.
Our letter is handled by all the wholesalers in Boston.
AGENTS: Marschuetz & Co., 25 N. 4th St., Philadelphia, Pa.; A. Rolker & Sons, New York; F. E. McAllister, 22 Dey St., N. Y.; Ernst Kaufmann & Co., 113 North Fourth Street, Philadelphia; H. Bayersdorfer & Co., Philadelphia, Pa.; A. D. Perry & Co., 33 Warren Street, Syracuse, N. Y.; A. C. Kendal, 115 Ontario St., Cleveland, O.; E. H. Hunt, 79 Lake St., Chicago; Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.; H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O.; T. W. Wood & Sons, 6th and Marshall Sts., Richmond, Va.; Jas. Vick's Sons, Rochester, N. Y.; Dan'l B. Long, Buffalo, N. Y.; C. A. Kuehn, St. Louis. F. C. Huntington & Co., Indianapolis, Ind.
J. A. Simmers, Toronto, Ont., Agt. for Canada.

CHOICE SWEET PEAS
Being the largest growers of the above in the world the trade are invited to send a list of their requirements and secure low prices for Fall delivery.
SHERWOOD HALL NURSERY CO.
Menlo Park and San Francisco, Cal.

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

Auguste van Geert,
Ghent, Belgium.
(ESTABLISHED 1808.)
K. J. KUYK,
SUCCESSOR.
Special Culture for the Trade.
ANDROMEDA JAPONICA, CROTONS,
ANTHURIUMS, DRACÆNAS,
ARALIA KERKHOVEANA, ERICAS,
" SIEBOLDII, EURYA LATIFOLIA,
" VEITCHII, LILACS FOR FORCING
ARAUCARIAS, METROSIDEROS SEMP.,
ASPARAGUS PLU. NANUS, OPHIOPOGON Jaburan. f.v.
ASPIDISTRA, ORCHIDS,
AZALEAS, PALMS,
BAY TREES, PANDANUS,
CAMELLIAS, RHODODENDRONS,
And full strain of Rare Plants and Novelties.
BULB FARMS AT
HILLEGOM, HOLLAND.
Ask for catalogue and prices, if not already received.

LITTLE'S ANTIPEST.
— A —
Valuable Discovery of the 19th Century.
SILVER MEDAL AWARDED
— BY THE —
CALIFORNIA STATE FAIR OF 1890.
This preparation Is a sure destroyer ot the **Scale, Wooly Aphis** and **Insect Pests** of any and all descriptions. It may be as freely used in the conservatory, garden and greenhouse as in the orchard or vineyard. It is non-poisonous and harmless to vegetation when diluted and used according to directions. It mixes instantly with cold water in any proportion. It is **Safe, Sure** and **Cheap.** No fruit grower or florist should be without it.
Send for Circulars and Price List.
R. W. CARMAN, General Agent,
291 AMITY STREET,
FLUSHING, Queens, Co., N. Y.

When writing to any of the advertisers on this page please mention the AMERICAN FLORIST.

Toronto.

The summer flower show comes off this week (19th and 20th), when there will be plenty of excitement among the profession. It will be a positive windfall for your correspondent, who will endeavor not to take up more than six columns.

How would the color of Verbena venosa be described is a question I never heard two people give the same answer to. Would Mr. F. Schuyler Mathews be kind enough to give us his definition and settle the business? It is a very pretty little bedding plant, but is particular about what company it keeps.

George Manton and the writer drove out behind the former's spirited steed to John H. Dunlop's establishment the other day and managed to get home with nothing worse than a broken shaft. John has his three new short-slope-to-the-south houses all planted, and the roses are doing remarkably well and making great progress in spite of the scientific calculations alleged to prove that the idea did not amount to much, which appeared in the FLORIST a few weeks ago. John is still a firm believer and has no doubt but that the coming winter will set all doubts at rest. The three new houses are 240x18 feet, with iron pipe posts to ridge and purlin, glass all double thick. The carnations in the open ground look wonderfully healthy and thrifty, a bed of his own special seedlings being extra strong. On our way out we called on Mr. A. McPherson (gardener to Col. Sweny) in order to take stock of his chrysanthemums, he being the principal prize taker at the show last year. It is a little early to judge what chrysanthemums will be by next November yet, but I thought them looking a little hard in the stem. Mac accounted for this by bad soil at first; however, he has the makings of some fine plants, with lots of care and attention.

The fare to Chicago has at last been reduced to single fare ($12.45) for the round trip. Now every one go. E.

CUTS!

Wood Engraving,
Zinc Etching,
Half-Tone,
Wax Engraving, Photo-Engraving,
Designing.

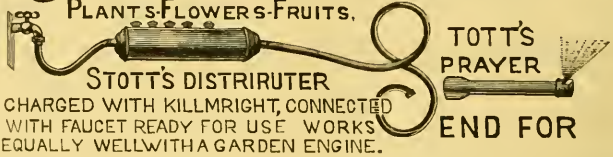
MANZ & CO.,
183 Monroe Street, CHICAGO. ENGRAVERS.
Mention American Florist.

FLORISTS' HOSE,
Made by E. W. Holt, member of the Society of American Florists.
Goodyear Rubber Store,
2 W. 14TH ST. NEW YORK.

TRADE MARKS. COPYRIGHTS.

SOLICITOR OF U. S. AND FOREIGN PATENTS,
Atlantic Building, Washington, D. C.
(Send sketch or model for free examination as to patentability.)

STOTT'S SYSTEM OF SPRAYING SAVES PLANTS-FLOWERS-FRUITS.
KILLMRIGHT KILLS, INSECTS AND MILDEW



STOTT'S DISTRIBUTER
CHARGED WITH KILLMRIGHT, CONNECTED WITH FAUCET READY FOR USE WORKS EQUALLY WELL WITH A GARDEN ENGINE.
STOTT'S PRAYER
STOTT'S SYRINGE

CELL "A" CONTAINS THE KILLMRIGHT
SEND FOR CIRCULAR AND TESTIMONIALS.
STOTT GARDEN IMPLEMENT COMPANY
136 LIBERTY ST. NEW YORK.

H. M. HOOKER COMPANY,
57 and 59 W. Randolph Street, CHICAGO,
NATURAL GAS MADE GLASS
FOR GREENHOUSES.
Write for latest prices.

"Standard" Flower Pots.
As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address
The Whilldin Pottery Company,
BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.
Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.
A. H. HEWS & CO., N. Cambridge, Mass.

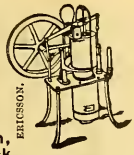
Standard Flower Pots.
We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.
SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

Lawn Vases.
THE LARGEST IN THE MARKET FOR THE MONEY.
17x20-inch ....price $1.00.
17x34-inch, with base, price $1.75.
20x22 inch .....price $1.50.
20x22-inch, with base, price $2.25.
Send for our price list of Standard Flower Pots, Plain and Fancy Vases, etc., etc. Terms cash f. o. b.
HILFINGER BROS. POTTERY, Ft. Edward, N. Y.

When writing to any of the advertisers on this page please mention the American Florist.

WHEN writing our advertisers please use one of your printed business letter heads or enclose your business card.

WATER
For Your GREEN HOUSE, ROSE HOUSE, NURSERY,
Conservatory, Lawn, House, Garden, Stock or any other purpose.
Send for Illustrated Catalogue OF THE
DE LAMATER-RIDER AND DE LAMATER-ERICSSON PUMPING ENGINE.



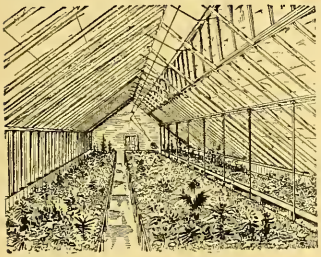
HOT-AIR PUMPING ENGINE.

PUMPING ENGINE.

Their operation is so simple and safe that a child can run them. They will pump water from shallow streams or any kind of well. They can be arranged for any kind of fuel. Capacity 1,500 to 30,000 gallons of water a day, according to size.

The De Lamater Iron Works,
87 South Fifth Avenue,
NEW YORK, N. Y.

THE CHAMPION



Automatic Ventilator.

The cheapest, easiest to operate, and by far the best machine in the market. Don't buy a Ventilator until you have seen my illustrated descriptive circular, which will be sent you free, giving prices, etc. Also Champion Soil Pulverizer and Sifter.

Address, E. E. WOLF,
Box 114. SPRINGFIELD, O.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaranteed.

CORRESPONDENCE SOLICITED.

Clear Cypress, from bottom gutter up is my specialty.

Lyman Felheim,
ERIE, PA.

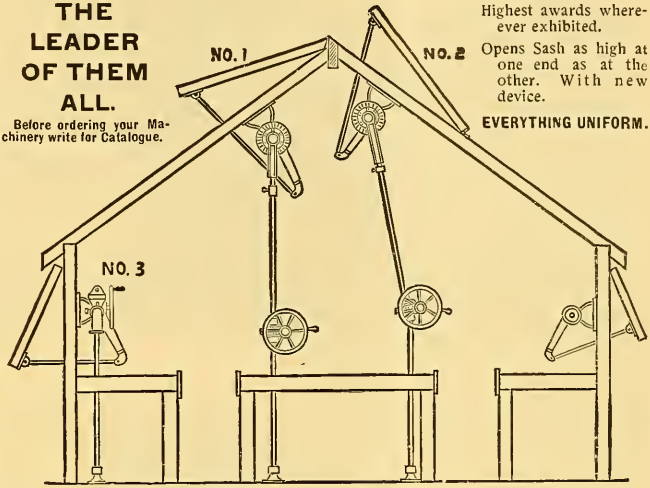
HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.
JOHN G. ESLER, Sec'y F. H. A., Saddle River, N. J.

Always mention the AMERCAN FLORIST when writing to advertisers.

STANDARD VENTILATING MACHINERY,

THE LEADER OF THEM ALL.
Before ordering your Machinery write for Catalogue.

Highest awards wherever exhibited.
Opens Sash as high at one end as at the other. With new device.
EVERYTHING UNIFORM.



E. HIPPARD, YOUNGSTOWN, OHIO.

SMITH & WEBSTER,
MAKERS OF
GREENHOUSE PIPE
FOR HOT WATER AND STEAM,
193 Lake Street, - CHICAGO. ILL.

FRENCH GLASS For CONSERVATORIES, ROSE HOUSES, Etc. Etc.
VANHORNE, GRIFFEN & CO.,
Importers of PLATE and WINDOW GLASS. Manufacturers of BENT GLASS and FRENCH MIRRORS.
131-133-135-137 FRANKLIN STREET, NEW YORK.
Note—Imported Glass is used in the best grade of Greenhouse building.

J. N. STRUCK & BRO.
Manufacturers of
• CYPRESS •
Greenhouse Material,
LOUISVILLE, KY.

STANDARD HOSE MENDER.

The only Mender using ordinary galvanized wire No. 14, instead of expensive bands. Any person can handle it with perfect ease. Thousands in use and all testify to its Wonderful Merits.

Sample Box, by Mail, 50 cts.
E. HIPPARD, Youngstown, Ohio.

THE WABASH
. . . WILL BE THE . . .
"FLORISTS LINE"
TO THE ST. LOUIS
CONVENTION, as well as returning.

Write F. A. PALMER, Gen'l Pass. Agt.,
201 Clark Street, CHICAGO.

It is expected a party will be made up leaving Chicago about August 7.

THE PERFECT DRAINAGE
BENCH TILE
For circulars, etc., address
W. P. Wight, Upland Green Houses,
Send your business card. MADISON, N. J.
Mention American Florist.

GLASS. ROCK BOTTOM PRICES. Send for Estimate. Satisfaction Guaranteed.
REED GLASS CO.,
65 Warren St., and 46, 48 & 50 College Place,
New York City.

Cincinnati.

The monthly meeting of the Cincinnati Florist Society was called to order by President Critchell Saturday evening, July 8. The attendance was only fair. We are very thankful to be able to report that ground has at last been broken and that in a short time the Jabez Elliott Floral Market will be ready for use. The society will then have its rooms in the building and we trust the members will not consider it too much of an effort to climb the stairs to the meetings. Wm. Sunderbruch, brother of "Harry," was married last week. His many friends extend congratulations.

Trade is very quiet and all the stores are taking a rest, very much against their will.

Will and Chris Murphy started last Wednesday for a trip to California, returning by the way of Tacoma, National Park and Chicago.

E. S. Johnston, with J. M. McCullough's Sons, will rusticate for a couple of weeks at Kanawha Falls, W. Va.

We regret to announce the death of Mrs. Mack, wife of Ernest Mack, of Price Hill, which occurred on the morning of the 11th. Mr. Mack has the sympathy of a host of friends. G.

Base Ball.

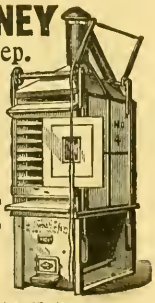
The Peter Henderson & Co. base ball club played the John Lewis Childs' club at Floral Park, N. Y., July 1. The latter club was victorious by a score of 6 to 4.
G. B. R.

OKLOHOMA CITY, O. T.—The Oklohoma Floral Co. has added a new house 16x75, making a total of 5,000 feet of glass.

PITTSBURG, PA.—J. H. Harrell has started in business as a grower at Oak P. O., Pa., about 2½ miles from this city. His houses are of modern style and with all latest improvements. For the present he will confine himself to roses and bulbs.

SCOLLAY'S
IMPROVED
PUTTY BULB,
For Glazing Sash, Etc.
— ALSO THE —
Patent Plant Sprinkler
For sale by your Seedsman, or sent, postpaid, for $1.00.
JOHN A. SCOLLAY,
74 & 76 Myrtle Ave.,
BROOKLYN, N. Y.
Send Stamp for Catalogue.

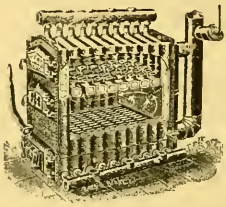
MAKE MONEY
While You Sleep.
STAHL'S
EXCELSIOR
FRUIT DRIER
Evaporates Fruit DAY and NIGHT. Catalogue free upon application.
Address
WILLIAM STAHL
EVAPORATOR COMP'Y,
QUINCY, ILL.



Mention American Florist

THE "LOCKLAND"
Sash Bars ✳ ✳ ✳
ARE ALWAYS SATISFACTORY.
This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.
GUTTER MATERIAL, RIDGES, SASH, ETC.
The finest CLEAR CYPRESS used.
Write for circulars and estimates. . . .
LOCKLAND LUMBER CO.
. . . . . Lockland, O.

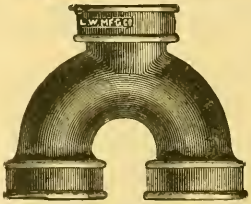
Mention American Florist.



Royal Heaters.
—:o:—
HOT-WATER,
STEAM.

Now is the time to send for a catalogue of
BOILERS
so you can make your selection for next winter.
Write us.
HART & GROUSE,
UTICA, N. Y.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

L. WOLFF MFG. CO., 93 to 117 W. Lake Street, CHICAGO.
WRITE FOR ILLUSTRATED CIRCULAR.

IMPROVED GLAZING.
Zinc Joints for butting glass without laps. No leakage. No sliding of glass. Practically air tight. Keeps out cold winds, thereby saving fuel. No laps, saves enough glass to pay for the zincs. No breakage of glass on account of frost or ice. Some of the largest growers in the country are using "Gasser's Patent Zinc Joints" with entire satisfaction.
Write for sample and price list.
J. M. GASSER, FLORIST,
101 Euclid Ave., CLEVELAND, O.

OUR
Sash Lifter AND Hinges
will do the work and cost you less than any other. Send your name and address and we will mail you description and price.
BAY STATE HARDWARE CO.
272 Freeport Street, BOSTON, MASS.

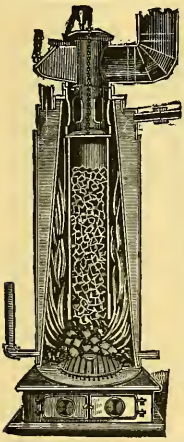
PAINT OR PUTTY.

For Greenhouses, Conservatories Or any other Structure. . . .

No Paint can be made too durable for the greenhouse, none too handsome for the homestead.

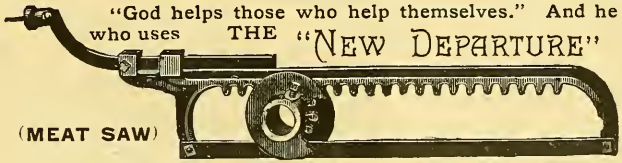
We make Paints **BECAUSE WE KNOW HOW**, and have facilities to do it. We ship to all Railroad Stations and Boat Landings without regard to distance, and will make prices laid down at figures which will pay you to patronize a cash market.

HAMMOND'S PAINT AND SLUG SHOT WORKS, Fishkill-on-Hudson, N. Y.



THE WILKS HEATER,
FOR HEATING
GREENHOUSES, STORES, DWELLINGS, ETC.
Manufactured by THE S. WILKS MF'G CO. 123 S. Clinton St., CHICAGO, ILL.
SEND FOR CATALOGUE.

"God helps those who help themselves." And he who uses THE "NEW DEPARTURE"



(MEAT SAW)

VENTILATING APPLIANCE,

helps himself and those who help him in his labors, and is therefore doubly blessed. Send for price and description.

J. D. CARMODY, Evansville, Ind.

Or call and see the man and machine at his greenhouse office, located on the lawn west front of Horticultural Building, World's Fair grounds, Chicago, Ill.

Pat. 1882, '85, '86, '88, '90, '91.

FOR WATER, AIR, STEAM, ACIDS, OILS, LIQUORS, GAS, SUCTION,

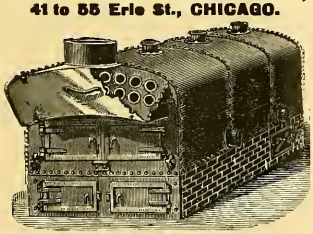
And for any and every purpose for which a hose can be applied.

Sizes, ½-inch to 42 inches diameter.

The making, vending or use of any Serviceable Armored Wire Bound Hose not of our manufacture is an infringement on one or more of our Patents. The rights secured to us render each individual dealer or user responsible for such unlawful use with all the consequences thereof. For prices and discounts address **WATERBURY RUBBER CO.**, Sole Mf'rs and Owners of all the *Sphincter Grip Armored Hose Patents*, 49 Warren Street, New York.

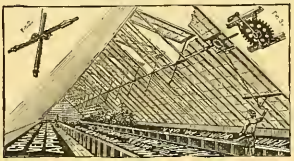
J. C. VAUGHAN, Agent, CHICAGO.

KROESCHELL BROS.
IMPROVED
Greenhouse ×× Boiler,
41 to 55 Erie St., CHICAGO.



Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around front, sides and back). Write for information

SUCCESSFUL GROWERS
USE THE BEST VENTILATING APPLIANCES.



The Champion Ventilating Apparatus cannot be equaled in point of

CHEAPNESS, DURABILITY OR EFFICIENCY.

Circular is yours for the asking. Address

AMERICAN ROAD MACHINE CO.,
. . . . Kennett Square, Pa.

VICTOR SPRAY PUMP.

The most wonderful pump ever invented. Requires no foot-rest or support. Send for prices.

HENION & HUBBELL, 55 N. Clinton St., Chicago, Ill.

The Summer Tours

of the MICHIGAN CENTRAL, "The Niagara Falls Route," are unrivalled in their variety, picturesqueness and comfort, embracing the best routes to Petoskey, Mackinac Island and Michigan Resorts, Niagara Falls, Thousand Islands and the St. Lawrence River, the Adirondacks, Green and White Mountains, Canadian Lakes and the New England Sea Coast.

A copy will be sent upon application to

MR. L. D. HEUSNER,
City Pass'r and Ticket Agent,
No. 67 CLARK STREET, CHICAGO.

This is "THE FLORISTS LINE" to the World's Fair.

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

Index to Advertisers.

Abel C C & Co.....1289
Adv. Rates, etc.....1286
American Boiler Co 1246
American Road Mach Co..... 1246
Anchorage Rose Co. 1285 1286
Bailer F A.....1249
Barnard W W & Co...1288
Bay State Hdw Co....1284
Bayersdorfer H C Co 1291
Berger H H & Co.....1288
Bonsall Jos E & Son ..1286
Boston Letter Co 1291
Brackenridge & Co....1240
Brauer & Richter.....1289
Brown A Canfield.....1285
Burns & Raynor.....1287
Burrow J G.....1240
Burton John..... 1291
Carman R W..... .. 1291
Carmody J D.....1285
Chandlee Geo F 1292
Corbrey T J 1287
Cox Seed & Plant Co..1288
Currey G W & Co.....1284
Davidson A E.....1240
De Lamater Iron Wks1293
Dillon J L.....1285
Dreer H A.....1288
Elliott W H.....1286
Ellison Wm..... .. 1287
Ellwanger & Barry....1285
Felheim Lyman.....1293
Field S B.....1284
Forstermann L 1240
Fostoria Floral Co....1285
Gasser J M 1294
Goodyear Rubber Store 1292
Grossman C M.....1291
Gurney Heater Co....1296
Hall Ass'n.....1293
Hammond Benj.....1295
Hancock Geo 1289
Hart James.....1287
Hart Michael A 1287
Hart & Crouse.....1294
Hartford H E.....1286
Henion & Hubbell....1295
Herr Albert M.....1289
Hews A H & Co.....1292
Hillinger Bros.....1292
Hill E G & Co.....1240
Hippard E 1295
Hitchings & Co.....1296
Hooker H M Co.....1292
Horan Edw C.....1287
Hulsebosch Bros.....1288
Hunt E H.....1287
Hunt M A.....1285 1291
Hunter & Purdy.....1287
James R H.....1288
Jennings E B.....1291
Kaufmann Ernst & Co1291
Kemble Floral Co 1295
Kennicott Bros.....1287
Knapp O R.....1240
Koffman E.....1286
Krick W C.....1291
Kroeschell Bros 1295
Kuehn C A.....1287
Kuyk K J 1291
La Roche & Stahl.....1286
Lippincott Miss C H..1288
Lockland Lumber Co..1294
Lombard R T.....1289
Long Dan'l B.....1287
Lonsdale Edwin..1289 1290
Lord & Burnham Co..1296
McCarthy N F & Co...1287
McFarland J H.....1286
McFarland J H Co....1290
MacBean A S.....1285
Maus J & Co.....1292
Marschuetz & Co.....1291
Michel Plant & Bulb Co 1289
Millington.....1287
Moffatt G J.....1288
Moninger Jno C 1295
Moore Frank L.....1285
Niagara Falls Route..1295
Niles Centre Floral Co1287
Olson M.....1287
Ouwerkerk P.....1289
Peck & Sutherland....1287
Pennock C J.....1289
Pennock Sam'l S 1289
Pierson F R Co. 1288
Prince A G & Co 1287
Quaker City Mach Co.1296
Randall A L. 1287
Reed Glass Co.....1293
Reed & Keller.... 1292
Roberts D H.....1296
Roehrs Theo.....1287
Roemer Fred.....1289
Rogers Nurseries.....1290
Rolker A & Sons.....1291
Rupp John F.....1289
Russell S J.....1291
Sander & Co.. 1290
Schneider Fred.....1290
Schulz Jacob.....1285
Scollay John A 1294
Seblre P & Sons.....1289
Sheimire W R.....1289
Sheridan W F.....1287
Sherwood Hall Nur Co1291
Siebrecht & Wadley...1290
Siptle, Dopfiel & Co...1292
Situations wants.....1284
Smith Nathan & Son..1290
Smith & Webster.....1293
Spooner Wm H.....1285
Stahl Adolph.....1289
Stahl Wm 1294
Stoldt C.... 1290
Storrs & Harrison Co.1285
Stott Garden Imp Co..1292
Struck J N & Bro.....1293
Sunderbruch H L.....1287
Tesson R F.....1285
Toole Wm.....1289
Tottenham Nurseries.1289
Tricker Wm..... ... 1290
Van Horne Griffen & Co..... 1293
Van Waveren & Kruyff.. 1288
Vaughan J C.... 1288 1289
Wabash R R 1293
Waterbury Rubber Co1295
Weatherod's Sons T W1295
Weeber & Don.....1288
Welch Bros.....1287
Whilldin Pot Co.....1292
Wight W P.....1293
Wilks S Mfg Co.....1295
Winter N D.....1284
Wisconsin Flower Ex.1286
Wolf F E 1293
Wolff L Mfg Co.....1294
Wood Bros.....1285
Zirnglebel D.....1289

WANTED—IMMEDIATELY.

Three underhelpers. Wages on application. Best of references required. Address

E. G. HILL & CO., Richmond, Ind.

CYPRESS GREEN HOUSE MATERIAL

CLEAR

CYPRESS

BARS

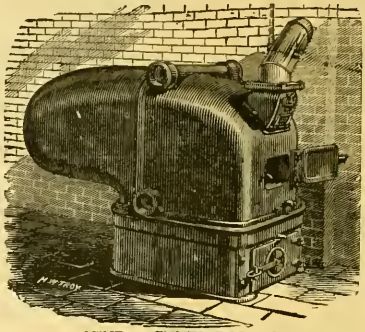
HOT BED AND VENTILATING SASH

JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

GREENHOUSE HEATING AND VENTILATING

Horticultural Architecture and Building.



HITCHINGS & CO.

Established 1844.

233 Mercer St., New York.

FIVE PATTERNS OF BOILERS.

NINTEEN SIZES.

Perfect Sash Raising Apparatus.

Rosehouses, Greenhouses, Etc., of Iron Frame Construction, Erected complete, or the Structural Iron Work shipped ready for erection.

Iron Frame Benches with the "Perfect Drainage Bench Tile" or Slate Top.

SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUE.

LORD & BURNHAM CO.

Horticultural Architects and Builders,

STEAM AND HOT WATER HEATING ENGINEERS.

☞ Plans and estimates furnished on application. . . . . .

Front view of a portion of our exhibit at the World's Fair.

. . . SEND FOUR CENTS POSTAGE FOR ILLUSTRATED CATALOGUE. . . .

LORD & BURNHAM CO., Irvington-on-Hudson, N. Y.

STEAM · AND · HOT · WATER · HEATERS

FOR

GREENHOUSE HEATING.

156

DIFFERENT SIZES.

American Boiler Company.

BOSTON,	NEW YORK,	CHICAGO,	DENVER,	SAN FRANCISC
195 Ft. Hill Square.	94 Center St.	34-36 Dearborn St.	Mining Exchange Bldg.	80 Crocker Bldg.

D. H. ROBERTS,

159 and 161 S. Fifth Avenue, - NEW YORK,

NATURAL GAS MADE GLASS,

FOR ROSE HOUSES, CONSERVATORIES, ETC., ETC.

☞ Look at our WORLD'S FAIR EXHIBIT in Horticultural Building.

GURNEY Hot-Water Heaters FOR Greenhouses.

Send for a copy of our book "How best to heat our houses."

GURNEY HOT-WATER HEATER CO.

163 FRANKLIN ST., BOSTON.

New York City: Johnson & Co., 71 John St. Phila.: J. C. F. Truchsel, 246 Arch St. Chicago: Rice & Whitacre, 47 South Canal St.

EVANS' IMPROVED

CHALLENGE VENTILATING APPARATUS

Write for Illustrated Catalogue.

QUAKER CITY MACHINE WORKS, Richmond, Ind.

Goodell Lib Mass Agri Col 1500 93

THE AMERICAN FLORIST

America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. VIII. **CHICAGO AND NEW YORK, JULY 27, 1893.** **No. 269**

THE AMERICAN FLORIST

Copyright 1893, by American Florist Company. Entered as Second-Class Mail Matter.

PUBLISHED EVERY THURSDAY BY

THE AMERICAN FLORIST COMPANY.
322 Dearborn Street, Chicago.

Subscription, $1.00 a year. To Europe, $2.00.

Address all communications to

AMERICAN FLORIST COMPANY.
P. O. Drawer 164, CHICAGO.
Eastern Office: 67 Bromfield St., Boston.

The Ninth Annual Meeting

— OF THE —

SOCIETY OF AMERICAN FLORISTS

— WILL BE HELD AT —

ST. LOUIS, MO.,

AUGUST 9, 10 AND 11. 1893.

Members may remit the annual dues ($3.00) to the secretary or treasurer prior to the meeting, thus avoiding the crowd and relieving the officers on the opening day. Badge for 1893 will be sent by mail to those who remit in advance of the meeting.

Intending members can obtain any information wanted by addressing the secretary.

OFFICERS:

WM. R. SMITH, Washington, D. C., president; PROF. WM. TRELEASE, St. Louis, Mo., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass, secretary; M. A. HUNT, Terre Haute, Ind., treasurer.

CONTENTS.

From the east to St. Louis 1297
Chicago to St. Louis 1297
Society of American Florists 1297
Carnations—Seasonable hints 1298
Rhododendrons at the World's Fair (illus) . 1298
Wholesale methods in palms and ferns 1298
Miscellaneous seasonable hints 1300
The World's Fair 1300
Aristolochia gigas var. Sturtevantii (illus) . . 1301
Hardy plants 1302
Rubbers 1302
Group of Ficus elastica (illus) 1303
An object lesson from Camden, N. J. 1303
Fraud which will vitiate assignment 1303
Gloxinias at the World's Fair (illus). 1304
New York 1304
Philadelphia 1304
Toronto 1305
Boston 1306
Buffalo 1308
The seed trade 1310
Chicago 1310
St. Louis 1312
Baltimore 1314
Ailantus glandulosa 1316
Crude oil for fuel 1318

MERIDEN, CONN.—Wm. Woodley is erecting new houses to the extent of 4,000 feet of glass.

WORCESTER, MASS.—A plant of Agave Taylorii on the grounds of Hon. Stephen Salisbury will be in bloom in a few days. This rare agave is a hybrid between A. ziminiflora and A. densiflora and this will be the first instance of its blooming in this country. Mr. John Coulson, the gardener, is a specialist in agave culture.

From New York and Boston to St. Louis, Chicago and Niagara Falls. A Splendid Excursion.

The eastern members of the S. A. F. are to be congratulated on the arrangements made for their visit to the convention at St. Louis and the World's Columbian Exposition. The rates are much lower than could have been expected and the comfort and pleasure of traveling in a special train in the company of friends is a pleasant prospect as compared with the discomforts sure to be experienced by those who go to Chicago on the cheap second rate excursion trains which are being provided for the general public.

Special Wagner cars will leave New York and Boston over the West Shore railroad and Hoosac Tunnel route on the afternoon of Monday, August 7, and connect at Rotterdam Junction. It is expected that the delegates from Philadelphia, Baltimore and Washington will join the New York party also. The route will be via Utica, Syracuse, Rochester, Buffalo, Niagara Falls, Hamilton and Detroit to St. Louis, and those wishing to join the party at either of these points can have accommodations reserved for them on application. The special low price tickets will be *good only on this train as far as St Louis*, after which they will be good on all first class trains over the Wabash railroad to Chicago and home up to August 31.

Parties wishing to join the Boston delegation should make application at once to W. J. Stewart, 67 Bromfield street, Boston, and those wishing to connect at New York or westward should apply to John Young, 20 West 24th street, New York. *The special tickets cannot be procured elsewhere.* A prompt application will secure better accommodations than can be had at the last minute and will also facilitate the work of the committee.

Chicago to St. Louis.

While all arrangements are not yet perfected we feel safe in saying that the rate and accommodations will be very satisfactory. The matter is in the hands of Mr. P. J. Hauswirth, 318 Wabash avenue, Chicago, and by the time this appears he will probably be in a position to name rate, etc., to those who apply for information by mail.

Society of American Florists.

President Smith has appointed Mr. Patrick O'Mara a member of the Executive Committee, to fill the place of Mr. Chas. Henderson, who has resigned on account of inability to attend to the duties of the position.

The committee on nomenclature of the Society of American Florists desires information concerning the misapplication of names in the trade during the past year. All persons interested in securing a stable nomenclature of decorative plants are requested to send to the chairman of the committee at once a list of synonyms that they have observed, indicating the place in which they were seen and, in the case of evident intention to mislead, the circumstances in each case. Address William Trelease, Chairman, Missouri Botanical Garden, St. Louis, Mo.

Chairmen of Committees of the St. Louis Florists Club for Convention.

Reception: Wm. Trelease, Missouri Botanical Gardens.

Ladies' Reception: Harry W. Chandler, Jr., 717 Olive St.

Entertainment; J. W. Kunz, 706 Olive Street.

Bowling: Fred Ostertag, 2334 Washington Ave.

Decoration: Henry Ostertag, 2334 Washington Ave.

Badge: Julius Koenig, 6471 Florissant Ave.

Printing. Chas. Connon, 2742 Olive Street.

Bureau of Information: J. M. Jordan, 706 Olive St.

Hotels: Robert F. Tesson, West Forest Park.

Superintendent Trade Display. E. H. Michel, Magnolia and Tower Grove Aves.

St. Louis Hotels.

Below are given the names and locations of the hotels at which rates have been secured by the local committee for convention week, and the rate per day together with distance from convention hall and number each hotel can accommodate.

Hotel Barnum, 6th and Washington Aves. European plan, single, 75 to $1.50 double $1.50 to $2. Distance seven blocks. Can accomodate 50.

The Belvedere, 13th and Washington Aves. American plan, single, $2 to $2.50; double, $1.50. Distance two blocks. Can accomodate 50 to 75.

The Benton (gentlemen only), 8th and Pine Sts. European, $.75. Seven blocks. Accommodate 100.

Continental Hotel, 4th and Elm Sts. European, $1. Distance sixteen blocks. Accommodate 75.

Hurt's Hotel, Broadway and Chestnut Sts. European, single, $1; double, $1.50. Twelve blocks. Accommodate 200.

LaClede Hotel, 6th and Chestnut Sts. American, $2 to $3. Eleven blocks. Accommodate 100.

Lindell Hotel, 6th and Washington Ave. American, $2.50 and upwards. Nine blocks. 200.

Merchants Hotel, 12th and Olive Sts. American, single, $2; double, $1.50. Three blocks. 50 to 75.

Moser's Hotel, Pine St. between 8th and 9th Sts. European, single, $1; double, $1.50. Seven blocks. 50.

Hotel Rozier, 13th and Olive Sts. European, single $1 to $3; double, $1.50. Two blocks. 75.

Southern Hotel, 5th and Walnut Sts. American, $3. Fourteen blocks. 300.

St. James Hotel, 5th and Walnut Sts. American, $2. Fourteen blocks. 200.

Seasonable Hints.

Insects and diseases are always seasonable subjects for discussion. We have already alluded to the green fly or aphis and the red spider as affecting the carnation. These are probably the worst enemies the florist has to contend against under glass. At least they would be if allowed to have their own way. There are many other pests of minor importance, but which at times give us a great deal of trouble and loss.

Thrip is a small jumping insect with which we are not familiar, never having been bothered with it; probably because we are particular to fumigate with tobacco regularly at least once a week. Tobacco smoke is the most effective remedy against it. Nicholson's Dictionary of Gardening gives descriptions and remedies.

The "carnation twitter" is a small insect which is said to occasion a good deal of trouble at times. The leaves where attacked have a cankered and twisted appearance. This insect has also failed to come under our observation. The reader is referred to Peter Henderson's Practical Floriculture for further information. We would say that we have had the ends of the shoots of the carnation to curl, but certainly not from any insect attack. If the plant was weakened from any cause, as for example when growing in too much shade, we have found this curl to appear and disappear on the removal of the cause.

Mice are not insects to be sure, but they often do a great deal of damage to plants during winter. They seldom interfere with them before cold weather. As soon as the ground freezes the mice come into the houses and cut the buds and flowers badly if not checked. One should keep a sharp lookout for them and place on the benches a few pieces of meat or other suitable material well salted with strychnine. This dose seldom has to be repeated, and we find it more effectual than traps. The large field mice with the long tails are the fellows that do the most mischief and will destroy literally bushels of buds if allowed to do so. The smaller house mouse is equally a sinner, but he is easily suppressed with the same remedy.

Snails are often very bothersome, but cleanliness goes a great way as a preventive. They seldom trouble new houses. As the buildings become decayed and dirt accumulates they increase in numbers. Good cement floors not only in the alleys but over all the area covered by glass would we think largely prevent their increase. Their ravages are usually worse in the spring, when they climb the flower stalks to eat the petals of the flowers, of which they are very fond. They will destroy large quantities of bloom in this way in a very short time. Fortunately they are easily caught, and a little trouble and patience will keep them in check. Go round after night with a lantern when they will be found at work and can be impaled on a wire carried for the purpose. Other remedies are trapping them under pieces of lettuce, slices of turnip, potatoes or apples, etc. These can be placed at various places on the benches and examined in the morning. The snails crawl under them for shelter and may be taken out and killed. W. R. SHELMIRE.

Avondale, Pa.

Rhododendrons at the World's Fair.

The accompanying engraving is from a photograph of Mr. Kelsey's display of rhododendrons in a tent on the island at the World's Fair.

In this collection the varieties that attracted the most attention from visitors were album elegans, Mme. Cavalho, Lady Hillingdon—a new sort with a very large truss of flowers of pinkish white spotted with greenish yellow, Helen Waterer—delicate rosy pink petals with light center, Everestianum, Lady Stafford—light flowers with dark spots on each petal, John Walter—cherry red, and Delicatissimum pure white.

Wholesale Methods in Palms and Ferns.

One hundred and ten thousand feet of glass, and every foot earning money, is a sight worth going miles to see. The above florist's dream is to be found at Henry A. Dreer's establishment at Riverton, New Jersey. Outside in the large grounds surrounding the houses the same condition of affairs exists. Every available foot of ground is filled up with "up to date" varieties of plants, and all in good condition. We feel we are safe in saying that this is not only the largest, but also the most successful, nursery of its kind in this country. Palms and ferns are to be seen here by the million, in all stages of growth and in the greatest variety. Cocos Weddeliana is grown in large quantities, the annual sowing being some 100,000 seeds.

"The demand for cocos," said Mr. Eisele, who kindly conducted us through the houses, "already large, is constantly increasing, thousands being used for dinner table ferneries alone. A notable feature of this palm is that freezing the seed does not seem to affect the germ. We received a consignment of seed last winter, which you can see came up very well, nearly, if not all, the seed germinating, and yet it had withstood for two or three days a temperature of 28°. The seed comes from Brazil, and is probably gathered in mountainous districts, where they may have occasional frosts. It is quite different with the areca; if the seed of this species is subjected to a temperature of 40° for any length of time it is sufficient to chill the seed to such an extent as to destroy the germ.

"The last lot of palm seed received came in sealed tin lined cases, packed in a material that looked like sawdust; it was just a trifle moist, and started the seeds to swelling, so that they are now commencing to germinate, although they have only been planted since the first of July. There are 50,000 areca seeds in this lot and they look very promising. I hardly like to say what the result would have been in case of delay in the delivery."

A house of kentias was now seen. Mr. Eisele said of these plants: "The home grown kentias are the best; they are more stocky and bushy than the imported."

"You still import, do you not?"

"Yes, more than ever, mostly kentias and latanias; we can never hold on to the young stock long enough to get it above a five or six-inch pot."

"Is it is not cheaper to import the larger sizes than to grow them?"

"No; they can be grown profitably here, but the demand has been so great for all kinds of palms, particularly the larger sizes, that we have to go to European markets to supply it. There are two ways to get up a stock of large palms; one is to put a prohibitive price on the growing stock, and as the plants grow raise the figure until the required size is reached. The other is to fill a house or range of houses with selected stock which is not to be sold until it has attained the desired size."

"This is certainly a healthy state of affairs."

"Yes it is; the men who make a specialty of growing decorative plants should have no cause to complain with the condition of business; it looks to us as if it will take a long time to overstock the market."

"You have a great many latanias; are they home grown?"

"All the smaller plants are, but those above 6-inch pots are imported; they have carried very well this season. Some importations reach us in bad condition, although lately they seem to understand packing better and there is not so much trouble. Belgian plants don't carry as well as those grown in England. In Belgium they hurry them up with bottom heat, and the result is a softer growth. When a plant is kept nearly a month in a box it needs to be in good condition when shipped, or it will soon show the effects of its journey."

"What varieties of palms sell the best?"

"Arecas and kentias are now the leaders; the latania held the van for a long time and there is more of it sold every year, but the demand for the others has increased to such an extent that they are now the most popular palms. Four houses in this large range, which is 100x130, are filled with arecas in the center and kentias in the side beds."

"Do palms do as well on the ground as on benches?"

"Yes, better; these beds are raised about ten inches from the ground, filled with ashes and bricked around, making a permanent job. All kinds of palms do well on these beds, excepting latanias; they are apt to make a top growth while the roots are dormant, and seem to grow best on tables."

"How about scale and other insects? The plants seem very clean."

"Yes, they are; we think we have solved the insect problem. In cleaning the palms of scale by hand, in the majority of cases, some scale is overlooked, or the leaves are damaged in the efforts of the workmen in removing them.

"Our plan is to hose the plants once a week with fresh tobacco water. We have a cistern or pit that holds about 3,500 gallons of water; into this at night is put one bale of stems and next morning the mixture is ready for use, and is pumped through our whole system of water pipes, and connection with the hose can be made in any house. We can have all the pressure we need; to-day it is about 60 pounds, which gives us a very good force of water. Wherever it seems to require it the man holds his hand back of a leaf and with his finger on the hose almost cuts away the insects by the force of this

RHODODENDRONS AT THE WORLD'S FAIR.

water. Tobacco water is very effective when fresh, but should be used the first day, as after that it seems to ferment and there is no virtue in it.

"This entire range is filled with plants we have been growing on, and we will commence to sell out of them this fall. We have now the finest lot of arecas in ten-inch pots we have ever had, and were only able to get them by refusing all offers a year ago."

They certainly are a fine looking lot of plants; those in the side beds are plunged in ashes to prevent the force of the water upsetting them. These are mainly kentias, and Mr. Eisele, as he passed his hand over the leaves, said "Hear the rattle? the imported plants don't sound like that."

A lot of Corypha australis, planted three in a pot, looked very much like Rhapis flabelliformis; these should make fine decorative plants. Leaving this range we came to a house in which were 50,000 latanias in thumb pots, the result of one hundred pounds of seed, and a lot more still in the seed bed.

"Here," said Mr. Eisele, "is a lot of palm seedlings of Livistona rotundifolia; we have never been able to get this variety in any quantity before, as they hold it at a high figure on the other side. Out of 10,000 seeds we have at least 6,000 plants.

"This," said Mr. Eisele, advancing into another house, "is where our ferns are started. The south side of this house is covered with burlap raised on a frame work six inches from the glass. By being raised, it makes the temperature at least 15° cooler than if it was on the surface of the glass. The north side is painted outside with white lead and petroleum; we used a ton and a half of lead last season on all our houses.

"One sowing of fern seed covers a table space of 4x100 feet; it is all sown in 6-inch pots. This is repeated six times a year. We have now over one million ferns in sight (Bostonian, take notice) and have sent away over 50,000 since the first of July. When ready to transplant, the seedlings are divided into small clumps and put into shallow boxes, in which they are kept until ready for potting. Outside there is now 10,000 square feet of frames filled with ferns in 2½-inch pots; they do very well out of doors at this season of the year. They are covered with sash painted and raised one foot above the frame to give plenty of air. They are put out about May 10. The demand for ferns has grown wonderfully. Thirteen years ago 10,000 would have been considered sufficient to glut the market; we thought then of giving one house entirely to ferns, but eventually gave only one side to them. Now during the winter season we often have to refuse orders on account of our stock running low."

"Which varieties sell the best?"

"There are at least twelve kinds that we grow in quantity: Adiantum cuneatum; Onychium Japonicum; Pteris serrulata cristata; Pteris cretica alba lineata; P. cretica magnifica; Pteris trumula; P. palmata; P. adiantoides; Nephrolepsis exaltata; Davallia stricta; Cyrtomium falcatum; Polystichum capense.

"Adiantum Farleyense is growing into favor as it grows cheaper. In propagating this variety the crowns without roots that are left over in dividing up the plants are put in sand covered with sphagnum under a sash on a side bench, with a little bottom heat. The ventilators of our fern houses are always open day and night during the summer and a little heat turned on at night to dry up the moisture."

"Are there any new ferns that are likely to be of commercial value?"

"Here is one, Pteris tremula Smithiana, a crested form of P. tremula, which looks well, and Pteris adiantoides, a variety with all the pinnæ peculiarly crested, will also be a good one.

"Here's something you don't often see, Doryopteris nobilis; we could only get three plants of this on the other side some time ago. It comes freely with us now from seed."

Pandanus utilis was seen in quantity in another house.

"This plant is not scarce with you at any rate."

"No, we never had seed of this plant to come up as this batch did; before we potted over 35,000, but have only 15,000 left; there has been great demand for it."

"Here is an infant industry," said Mr.

Eisele, stepping into a twin house, that is, two houses in which the dividing wall has been taken away and the gutter supported on posts six feet high. One side of this house had a large bed down the center, in which was planted Araucaria excelsa.

"This," said he "is the first house devoted entirely to this purpose in this country. We believe we can grow this plant here as well as they can abroad, if not better. We shall take cuttings from these plants, which are put in the sand and root in about six months, and when the old plants break we get another batch, and so on until the plants are worn out."

The glass on the house was painted and every third sash had been removed and a slat frame inserted, keeping the house cool."

"Is this a good style of house?"

"Yes, we like this way of building houses without partitions between very much. On the outside of this pair we have used galvanized, corrugated iron to cover the sides; it is three feet six inches high and three feet of glass above that to the sill. It is nailed to one thickness of boards, with a good quality of building paper between. We also have used corrugated iron on the ends of some of our houses next the sheds and like it very much; it looks neat and clean. We are thinking of using it in place of boards on tables; it ought to answer the purpose and last longer. It costs three and a half cents a square foot.

In frames outside were aspidistras. "There is not much money in the aspidistra," said Mr. Eisele. "We plant them in these frames during the summer with ten inches of manure under them, and they make a very good growth.

"Our ficus we grow in the same manner, striking one eye cuttings during the winter and planting them out here in May. They make fine plants by October, from fifteen to thirty inches high. The sash are taken off about the 15th of August, and they are hardened and get their color. About the 20th of September they are lifted and potted and the frames closed up for ten days. Inside of a month the pots are entirely filled with roots and ready for the winter campaign."

"You have now tried steam and hot water under pressure; which system do you like the better?"

"If we did not have so much steam we would not hesitate to put in the pressure system entirely; we like it a great deal better, and we are positive that it is the most economical. In our large range of six houses 100x26 each, all open together, the temperature at the end most remote from the boilers (156 feet) varied but three degrees.

The sheds connecting some of the houses are magnificent in proportion; the main one is 230 feet long by 25 wide and a wing from this was 100 long by 30 wide.

Out in the trial grounds everything was in "apple pie" order. A large section was planted with Clematis paniculata, which has had a great sale; it is an improvement on C. Flammula. The canna field was an interesting sight.

"What can you say about cannas?"

"There's lots to say, the principle thing being that they are getting to be almost as bad as the chrysanthemums in the many varieties that are being sent out. There are too many yellows among the new ones. Charles Moore, I like. Antoine Barton is too near Nellie Vaughan. Bassett's Red is the finest bronze foliage variety in cultivation; pity it hasn't a French flower. J. E. Bailey is another good new one, larger flower than N. Vaughan and more of a lemon color. Camille Bernardin is a good, large salmon. This one takes everybody's eye; it is called Edward Meig, like Bouvier, but more erect.

"Another good yellow is Martin Cahuzac. Perfection is not a bad one, bright yellow spotted with bronzy red. Of course these are first impressions; it is always hard to judge of a new thing. Charles Henderson we consider one of the very best dwarf crimsons, and we think it will become a great favorite. The canna is becoming a great favorite; we sold over 15,000 of Mme. Crozy alone this season. This variety will become to cannas what Verschaffelti is to coleus."

Too much praise cannot be given to Mr. Eisele, who has grown up with and managed this part of the business with such signal success. About a year ago the business was incorporated into a stock company, the heads of departments all becoming interested by taking shares of stock. The first year of this partnership has just closed, and the returns have been very satisfactory to all concerned. Mr. Dreer reports that it has been the largest year in the history of the firm.

K.

Miscellaneous Seasonable Hints.

Lilium Harrisii will soon arrive, and should be got into pots at once. They will not flower any earlier because you pot them now, as they can be left out in the frame as late as you like. It is best to grow two sizes; five to seven inch bulbs or still smaller is the best size to grow for cutting, as they will average three to five flowers, and you don't waste as many buds when cutting for a bunch as you do with the larger size bulbs, on which you expect seven to ten flowers. The small bulbs should be planted in boxes. They are easy to handle, less expense than pots and less attention is needed. The box I find useful is eighteen inches long, fifteen inches wide and five inches deep inside. This will hold fifteen, or if quite small, eighteen lilies. A few of the small bulbs can be grown in 4-inch pots and brought along at different times, as they are very useful for winter decoration. The great bulk of the large bulbs, seven to nine or larger, are grown for Easter. These I grow in 6-inch pots, singly of course. The compost used for lilies should have no fresh animal manure in it; they don't like it, and if you use any manure let it be thoroughly decomposed. Bone meal is an excellent stimulant for them; a good light loam, without being gritty or sandy, is what they thrive in. In potting the bulbs when received I leave the top of the bulb even with the surface of the soil, which is two inches below the rim of the pot or box. After a good soaking fill up the pot or box to the top with some well rotted old hotbed or rotten refuse hops. This is a mulch and you don't have to be continually watering them. When they are taken into the houses in November or December turn the pot on its side and this loose covering will fall off or is very easily removed. Then the pot is filled up to the usual height with a dressing of loam and a liberal allowance of bone meal. There is very little labor or expense about this method. In fact the labor will be saved a dozen times in the watering. But the importance of this plan is that all those roots which are bound to spring out round the collar of the lily will have good stuff to feed on by the late surfacing you have given them. Lilies will stand a high temperature the last few weeks before opening their buds, but must be brought on quite slowly when first housed.

Don't neglect to keep your cytisus well clipped back with the shears. They are growing fast now and will bear any amount of it. Now is the time to get them into neat, compact little heads.

Those who did not have time to grow any chrysanthemums in pots, or what is better, have any nice plants to lift from a bench, can still have some beautiful and salable pots or pans of this Queen of the Autumn by putting in a few hundred cuttings at once. Choose dwarf growing distinct colors, Ivory for a white and W. H. Lincoln for a yellow is grand for this purpose. It is not a day too late. Keep cuttings saturated and cool as you can and when rooted plant in the pans. These pans you can get any size. The 10 and 12-inch are best for this purpose; they are five and six inches deep and look so much better than an ordinary pot, and so much easier to handle. A twelve-inch pan will hold one dozen of the young plants. They can be tied out when the blooms begin to crowd and are allowed only one perfect flower for each plant. These fine looking pans would be disqualified at any flower show, but they are not disqualified for the market, and take well. Don't put these pans out of doors at any stage of their growth; they are far better under glass all the time.

Buffalo, N. Y. WM. SCOTT.

The World's Fair.

The best show now to be seen is the gloxinia display in the New York greenhouses, of which mention is made in connection with the illustration in this issue. These greenhouses are attractive in every way and admirably cared for. The tuberous begonias which were making such a show have now met with a serious check; they have been attacked by a disease, presumably of fungoid origin, which suggests in appearance the pansy blight. It attacks both flowers and leaves, and if unchecked soon denudes the plant of both, leaving little more than a stump. All the flowers have been picked off in the New York greenhouse, the plants are syringed in the afternoon and the house is being closed down early, everything being done to grow the plants on rapidly, in the expectation of growing them out of the disease. As they were very robust plants to begin with it is probable that this treatment will be effectual. This disease is not by any means new to begonia growers, and so far the only remedy recommended by experience is to grow the plants out of it. All the tuberous begonias at the Fair appear to be suffering from it, which is greatly to be regretted, as it will interfere with the large display expected when the members of the S. A. F. visit us. The house in which these plants are seen has been very gay, containing two hundred gloxinias and five hundred begonias.

The New York display will be enriched by several thousands of blooming lily of the valley while the visiting florists are here. Cold storage bulbs were received from Ernst Asmus last week. The little rose house is very flourishing, and there is no doubt that the progress of Senator McNaughton, Mr. Craig's white Perle, will be watched with interest. The growth and habit of the plant appears to be identical with Perle, the flower a creamy white. Mrs. W. C. Whitney is also doing very well; both these varieties are blooming well. The house also contains Mme. Caroline Testout and Kaiserin Augusta Victoria.

ARISTOLOCHIA GIGAS VAR. STURTEVANTII.

The Hitchings greenhouses now contain plants, chiefly from the Pennsylvania exhibit, gloxinias and caladiums. The chief caladium exhibit, however, will be in the Horticultural Building. The noble display of these plants loaned by Geo. W. Childs makes a show in itself; some of these plants are already in the large building, while others are yet in the department greenhouses. Although there are other good caladiums there, Dreer having some excellent sorts, no other exhibit approaches Mr. Childs' either in size or beauty of plants.

The display of foliage begonias from E. G. Hill & Co., Richmond, Ind., is now arranged in the south curtain, and is in many respects a remarkable exhibit. The leaves are of varying types, some showing the influence of rex, while in others the shape of the leaves suggests ricinifolia or manicata. They are, for the most part, Mr. Hill's hybrids, the result of careful study and selection. Among those noted was Greyhound, leaves large, oblique, ovate, silver, veined with green; Maggie Mitchell, leaves acuminate, lobed, silver, veined in dark green; Seedling X, a very showy leaf, green, splashed and spotted with silver; Bertha McGregor, very strong growing, green and silver, crimson underneath; Mme. Montet, leaf oblique, cordate, dark green, bordered with ferruginous hairs, hairy stems and very strong growth; Mrs. A. G. Shepherd, leaves oblique, ovate-oblong, silver, with green center and margin; Ed. Kennedy, dark green, with broad band of silver and green margin, under surface red; M. Pavart, bright velvety green, with silver splashes between the veins and hairy margin; Robert George, leaves acuminate, lobed, silver, veined with green. These plants are arranged in a bank, with a backing of Caladium esculentum, and they are fine in effect.

Among orchids there are some nice pieces of Chysis aurea in Pitcher & Manda's collection now in bloom, and some showy spikes of Mormodes pardinum. As the plants go out of bloom they are replaced by others from the forwarding houses, and a continuous succession will be kept up.

The south court was to be devoted to aquatics and contains two good sized tanks, but only one of them is planted, in which is the exhibit of E. D. Sturtevant, Bordentown, N. J. It is thought that the other tank will be left vacant all summer, which will be very unfortunate. Mr. Tricker's display, in the tank in front of the building, is now gay with the water poppy, which is flowering very abundantly.

Over on the Wooded Island there is comparatively little change since last week. In the collections from Germany and Holland Montbretia crocosmiflora is bright with bloom, and buds are swelling on the Japanese anemones. The roses are showing the effect of the heat and blooms are but scattering on most varieties. The border of Rosa Wichuraiana surrounding the bed of Dawson's hybrids is covered with its little white single flowers, and its dark shining foliage is very handsome; its odd prostrate habit suggests usefulness in a variety of ways. The hollyhocks are still abundantly in bloom, though the foliage is rather burned in a good many cases, and the sunflowers begin to make a show. The Japanese irises are over. The German stocks still keep in bloom. A number of tea roses in the German exhibit, in a slightly shaded position north of the main rose garden, are flowering more freely than those in that exposed locality and look very well. Cosmos is just coming into bloom; indeed there is no lack of flowering material and the island will be bright right up to the approach of frost.

Aristolochia gigas var. Sturtevantii.

An excellent illustration of this remarkable flower is presented in the present issue. The plant is now in flower in the Lord & Burnham houses at the World's Fair, containing a part of the New York state exhibit. It is a strong-growing vine, a native of Guatemala, and belongs to the same family as the Dutchman's pipe, but instead of little pipe like blooms it has enormous fantastic blossoms, pale green on the outside, and looking, before open, much like the body of a pelican, whence the popular name of pelican flower. When open the flower is about twelve inches wide and eighteen inches long, with a tail-like appendage twenty to forty inches long. When open the outside of the flower is cream color, the inside dark brown, mottled near the edges and having a very disagreeable odor. This variety originated with E. D. Sturtevant, of water-lily fame.

OUR Convention Number and Columbian Souvenir will be issued next week.

Hardy Plants.

A walk around the garden of hardy plants at Lincoln Park, Chicago, shows the following in bloom:

Delphinium formosum is now at its best. Nicotiana longiflora is in good bloom. Lychnis Haageana will bloom for five or six weeks more; it is a rich vermilion scarlet, dwarf in growth and very floriferous, considered an excellent plant for the border. Lupinus Hartwegii will soon be over. Helianthus multiflorus plenus will bloom all summer. Geum atrosanguineum will soon be past. Foxgloves and doronicums are just passing out of bloom. Hemerocallis flava and fulva are now at their best. Achillea Egyptæca, yellow, is in fine bloom. Achillea The Pearl is also in good bloom. Aster corymbosa is just beginning. It is the earliest of the asters. Spiræa aruncus is about done. Campanula Van Houttei has been very handsome, but it is now about out of flower. Gaillardias are at their best. Calceolaria annua is making a good showing of bloom and will flower all summer. Kæmpter's irises are at their best. Stevia eupatorium is just showing flower. Papaver umbrosum is at its best. Œnothera Drummondii is showing flower and will bloom all summer if weather is not too hot; it is not as free as Frazerii. The Snowdrift poppy is in its prime, as is also Chrysanthemum corinatum Burridgeanum. Pentstemon barbatus is in fine bloom and its tall spikes of scarlet flowers make it a very striking object. Cuphea silenoides is at its best, but it is not much valued here. Statice Suwarrowii is in its prime and will be fine for another month. Lobelia cardinalis is beginning to show color. The "corn cockles" (agrostemma) make a pretty show and will be in good bloom for six weeks yet. Statice Lemonium is in bloom and will flower all summer. Spiræa ulmaria is passing over. Armeria maritima Laucheana is in flower, but it scorches badly here and is unsatisfactory on that account. Agathæa cœlestina (Kaulfussia amellioides) is a very pretty thing, but doesn't stand the sun well here. Gypsophila muralis is covered with its minute blossoms. Phloxes are in bloom and will be mentioned in detail next week. Platycodon Wahlenbergii is just beginning to bloom and will continue in flower for two months; it is perfectly hardy here. The tulip poppy and the antirrhinums are now at their best. Dracocephalum argunense is just coming. The native Lilium superbum is in good bloom; it likes partial shade. Œnothera Frazerii is in good bloom; it likes a well-drained, sandy soil. Asclepias tuberosa is in full flower; it loves a dry situation. Asclepias incarnata is just beginning to bloom; it does best in a moist place. Lychnis chalcedonica has been in bloom three weeks and is now nearly over; it is a grand thing here. Stenactis speciosa is about done; it comes in ahead of the asters and is well liked here. Gilia capitata has been in bloom for a month and is now nearly done. The Mikado poppy makes a striking blaze of color here and there. Rudbeckia hirta is just coming into bloom; its value lies in its blooming ahead of speciosa; it is a native of the western states. Aster amellus is just coming into flower, as are Heliopsis lævis and Coreopsis lanceolata, and the advance guard of the hollyhocks are showing scattering flowers. The sweet williams are past and the aquilegias too. Clematis Jackmanii is showing a few flowers and Pentstemon gentianoides is about equally advanced. Godetia Lady Albemarle don't do very well here, though a beautiful thing when situation is favorable. Œnothera Drummondii nana is more compact and does better here than Drummondii.

Rubbers.

The untrained rubber, many feet skyward, takes its lofty flight
When fostered by skillful care, she displays beauty instead of might.
In thy erect, majestic form, some would have the dwarf, others tall,
But when grown into miniature trees then thy beauty pleases all.

—*By the bard of Kingsessing.*

W. K. Harris is a successful grower. He is not infallible, however, and has had his share of failures, but these have only spurred him on to greater efforts, and a visitor to his present establishment, with its dozens of well built modern houses full of choice saleable stock, can not but feel that he is on the grounds of a successful man. Mr. Harris confines himself to specialties, growing only such plants as seem to be in demand, getting them up in good shape and quickly. Of late years he has devoted considerable time to the rubber, and it is safe to say that he can grow better plants and in shorter time than they are grown anywhere else in this country. The tree rubber now so popular was first introduced and in fact the trade is now principally supplied from his place. Mr. Harris is always free to explain his methods of culture, and in a conversation with him a short time since he gave the history of his experiments with the rubber up to the present time.

"I received my stock originally from W. C. Wilson, it was all F. elastica, but there was a number of varieties or variations among the plants received. As I grew them on I selected those having the broadest leaves with short thick stems, and plants in which the leaves seemed to grow close together."

"How many variations of elastica have you noticed?"

"Well, I think I have seen about a dozen. There is one with a row of dots just inside the edge of the leaf, another is distinguished by its white sheath or leaf cover, which again is grey, or red, the latter being the color in the variety I grow. There is a great difference in the habit of the plants, some being too short, while others are inclined to shoot right up, with a long distance between the leaves. You have no doubt seen plants with short, narrow bottom leaves, while those above are broad and rich looking. Plants grown from cuttings often have this fault, if grown properly they would have broad handsome leaves from the pot upwards."

"You do not increase your stock from cuttings?"

"No, nearly all our stock is taken from plants grown in pots for sale. To get one form of tree rubber we are obliged to stop the shoot or shoots of a plant in order to make it bushy, and in doing this we get our young stock."

"Do you approve of putting out a lot of old plants that are unshapely and growing them to propagate from?"

"No, I tried this at first, but found it did not pay, some of the old fellows are pretty sure to have scale on them, and when planted out in a lot together this increases very fast and before you know it has obtained such a hold that it is almost impossible to get rid of them. There is one thing about this pest, however, if it is not brought to a place it will not come of itself. Certain conditions of heat and moisture or lack of them will breed greenfly, red spider, thrip and mealy bug, but you must buy your scale and it is sure to cost a lot of money as well as vexation. If once in the house it becomes a fixture, and adds considerably to the expenses of the place.

"It is easy to increase the rubber from one eye cuttings, with a leaf to them, but they do not make fine plants quickly; the bottom leaves are apt to be small, and as the plant grows, gaining strength, the new leaves become larger, giving it a top heavy look. In our stock the bottom leaves are invariably the largest and the plants have a symmetrical and natural appearance."

"Your method of propagation is a form of layering, is it not?"

"Yes, much the same; years ago they used to layer an old plant by putting it through a hole in the middle of a table and layering the branches into pots of soil. Later on pots filled with soil and moss were tied around the branches of the tree as it stood. Our plan is to use nothing but moss and to layer or cut only healthy young plants with strong shoots; these are cut where the wood is moderately hard, bending the plant down and drawing the knife towards you and upwards from the pot, making the incision about an inch or inch and a quarter deep into the center of the stem. Then take a piece of match stick and place it across the cut to keep it from healing together, which it will sometimes do without making roots. For binding on we use what is commonly called clump moss; this is much better than sphagnum, which, when it becomes dry, sheds the water and is hard to get moist again. The clump moss is cut into pieces like cubes, which, when tied to the plant, with the grain of the moss running the same as the stem and having a flat top to catch the water, is always moist. The moss is bound on with fine soft brass wire, which we like better than string, and then staked to keep everything in position."

"How long does it take them to root, or before they can be taken off?"

"In about three to four weeks they can be removed and potted up, and in a couple of months we get our first salable size. The plants from which the layers or tops are taken will soon break, and from these we get one form of tree or branching rubber.

"If they do not grow to be nice plants, as soon as they are large enough we layer or top them again, but it must not be done too often, if you care anything for the parent plant, as it weakens its growth."

"You have another class of trees, have you not—those that branch naturally, that is, without the use of the knife? How do you manage to bring about this result?"

"Oh, that is very easily done; the stock set aside for this form of rubber is selected from six months old plants; these are placed on a table by themselves, being watered and treated in the most natural manner possible. After a while they begin to branch of themselves, just as we want them to, and inside of a year they grow to be handsome specimen plants with branches all around. I kept a few of these for the second season last year and they grew to be ten feet high, with from fifteen to twenty branches. The largest pair I had were sold to grace the exhibit of a dealer in india rubber goods at the World's Fair at Chicago. Good specimens of these tree rubbers have brought me as high as $39 a pair at auction."

"No one else seems to be able to make

GROUP OF FICUS ELASTICA GROWN W. K. HARRIS.

them break of themselves. How do you account for it?"

"Well, I suppose they don't treat them naturally enough; they must be treated naturally, very naturally. All the plants except those I am propagating from I put outside during the summer, plunged in any loose material to keep from drying out. It is necessary to shade them with slats for the first week or two, but afterwards they can have the full sun, which gives the leaves a rich dark green and a fine glossy appearance." K.

Group of Ficus Elastica Grown by W. K. Harris.

The two tall plants at the right and left of the group are five feet high and about one year old. They are for natural grown trees and will soon send out side shoots and assume their correct shape.

The three plants on pedestals in the center, with the moss tied around the stems, are from four to six months old. They have been cut and the tops are now taking root into the moss.

The two bushy specimens in the front of the group are about one year old and represent a six months growth on plants from which the tops have been rooted.

K.

An Object Lesson from Camden, N. J.

Lord Rosebery, while travelling in India some years ago, was greatly struck with the fact that wherever he found a garden of any consequence he almost always found a Scot at the head of it. "Scotland seems to supply the worl with gardeners" was the remark he made when telling of this feature after his return to Great Britain. Robert Louis Stevenson refers to this ubiqnitous habit of the race to wander into out of the way corners of the world by giving some graphic sketches of lonely characters inhabiting strange and unexpected parts of the earth in his "Silverado Squatters." Some of these sketches are very amusing.

But, to a Philadelphian at least, the last place one would expect to find a thriving Scotch florist would be Camden, New Jersey. In the common talk of the every-day citizen of the Quaker City, to be "as dead as Camden" signifies about the same as the Bostonian's "as dead as Chelsea." The pith of the latter remark will never be fully appreciated until one has stood on the "Brimstone corner" and heard my friend Elijah Wood talk in his emphatic way about the dull market on a cold winter morning. However, these reflections on the deadness of the town of Camden may be open to some modification. So thought the writer at least when he called the other day on James M. Thoirs on Market street, Camden, and found him busy gazing skyward from the middle of the street at a gang of operatives who were engaged in building for him a new store and dwelling with a greenhouse in the rear.

In answer to an inquiry as to how in creation he ever came to land in such an out of the way place as Camden, Mr. Thoirs blamed it all on the AMERICAN FLORIST. He had come to this country from Scotland in '81 and was then a young man of 24, blessed with little pelf, but good health and a good knowledge of gardening. He went to Utica, New York, and remained there five years in the employment of Mr. R. Campbell, the able superintendent of Forest Hills Cemetery. Mr. Thoirs credits Mr. Campbell's thorough training with what he knows of horticulture in this country, and attributes a good deal of his success to the same source. In 1888 he noticed an advertisement in the AMERICAN FLORIST of a place for sale in Camden, N. J. That's how he came to locate in Camden. The commencement, five years ago, was a very modest one indeed, but by hard work, economy and strict integrity he got along, and now he is building a new store and dwelling with a greenhouse in the rear, as stated above.

The store will be twenty feet wide by fifty feet deep and will be fitted up with all modern improvements, double bay windows, tiled flooring, glass cases and patent refrigerators. The greenhouse will be a span roof twenty feet wide and fifty-five feet deep, and will be used mostly for storing palms and other foliage plants for decoration. The cost of the improvements will be close on $10,000. In addition to his retailing, Mr. Thoirs grows considerable of his own flowers. He confines this latter mostly to primroses, lily of the valley, Romans and daffodils. He claims that the growing, although on a limited scale, pays him well.

Mr. Thoirs is a prominent Mason and is connected with the Foresters and other organizations. It is safe to say that he now does the largest business of the kind in Camden, and his trade is increasing yearly as the people are finding out that they do not need to go to Philadelphia any more for their flowers and plants. This little story is an object lesson in more than one respect, first, as showing the Philadelphians that Camden is beginning to look up, second, by demonstrating anew the power of hard work and strict attention to business in compelling success; and last, but not least, it is a fresh illustration of the power which the AMERICAN FLORIST has exerted for the benefit of the trade since the paper was founded eight or nine years ago. This influence may not always appear on the surface, but it is working and has been working all the time in hundreds of different ways. The S. A. F. and its organ, the A. F., have done more for the advancement of the florist trade than most of us have any idea of, and the greatly improved standing of the trade in the community which has been apparent the past few years is directly traceable to their influence. Those not already members of "the family" should lose no time in becoming so. G. C. WATSON.

Fraud Which Will Vitiate General Assignments.

It is a well known principle of law that fraud will vitiate a general assignment for the benefit of creditors, but the trouble is to determine in a given case what is such fraud as will have that effect. Creditors have an interest in the property of their debtors. It has been called an equitable interest; it is the fund to which they look for the payment of the debts, and the law makes it so. Any alienation of property for the purpose of hindering, delaying, or defeating creditors in subjecting the property to the payment of the debts is fraudulent. So an assignment ostensibly for the benefit of creditors, but in reality intended to hinder, delay or defeat them, is fraudulent.

While a person retains the control and possession of his property, whether he is solvent or insolvent, he has the legal right to dispose of it if he does so honestly. But any transfer to put the property beyond the reach of creditors, or to reserve benefits to himself, is fraudulent, hence the vital question is the intention, and this must be determined from all the circumstances. So long as a debtor retains control of his property he can legally prefer one creditor to another, where by statute preferences in assignments are not forbidden. Even if insolvent he can pay to one the entire indebtedness, to another nothing, and such discrimination is legal.

To vitiate a general assignment, says the Court of Appeals of Colorado, in a case just decided, where these principles have all been affirmed, there must be fraudulent intention, followed by irregular and fraudulent disposition of the property, or a failure to convey all. In other words, there must be either a reservation of property, or such a disposition of it that the proceeds will inure in some way to the assignor. If made fully and in good faith it is not only a proper and legal application of assets, but an equitable one, preventing the sequestration and sacrifice of the estate by a few at the expense of the many, and, although it may operate to hinder and delay creditors, it is no ground for attachment. The fundamental principles are that the debtor must devote all his property absolutely to the payment of his debts; reserve no control for himself, must provide for no benefit to himself other than what may result from the payment of his debts; impose no condition upon the right of the creditors to participate in the fund; authorize no delay upon the part of the trustee.

Where a failing debtor makes an assignment purporting to convey all his property for the benefit of creditors, but intentionally withholds a valuable part, the assignment is fraudulent and void, as between the assignor and attaching creditors, though the part be withheld for the purpose of applying it to other debts not secured by the assignment, and be actually so applied. But it will be otherwise if the property not mentioned or referred to in the deed of assignment, taken with that reserved therein, is less than the assignor is allowed to hold exempt from execution. The fact that an assignment is made subject to legal exemptions is not a badge of fraud. And the omission of property shown to be valueless is no evidence of fraud. The omission of any large amount of property requires the strongest and clearest proof to establish that it was the result of an honest mistake, and not of a fraudulent purpose.

A voluntary assignment, not upon its face fraudulent in law, and containing no provision which raises a presumption of fraud in its execution, may nevertheless be subject to attack before the jury because of some provision in the deed looking to the benefit of the debtor and to the detriment of the creditor, and where no inference of bad faith may be drawn from the instrument itself by testimony outside of it.

The giving of preferences in a general assignment violates no rule of the common law, It is not a hindering, delaying or defrauding of other creditors, as these terms have been uniformly understood and interpreted. In many of the states, however, statutes have been enacted preventing or restricting it under prescribed penalties.

Creditors who assent to and affirm an assignment, with knowledge of the facts, cannot assail its validity.

Gloxinias at the World's Fair.

We present in this issue a group of gloxinias, from a photograph taken in the model greenhouses occupied by a part of the New York state exhibit. They are two year old bulbs and were started the first week in May, being put at once in the 6-inch pots in which they are now blooming. For a time at first they were stood under the benches in the department greenhouses until room was vacant on the benches, as the houses were very crowded at that time. The treatment was simple throughout, being the same as described more than once in the FLORIST, by Mr. Wm. Scott and others. They were kept in a temperature averaging 65° to 70°, nearer the higher temperature, and have grown on rapidly. They have been well supplied with water, keeping them always firm and plump.

The flowers show three types of growth, erect, drooping and flattened or achimenelike. The coloring is remarkably rich and varied. In some of the spotted forms the dots assume odd forms like a printed fabric; some again are uniformly dotted, others oddly blotched. Some remarkable deep purples and cherry reds are among them, and some exquisite pure whites. There are no named sorts among them, but they show an unusually meritorious mixed strain, and they are admirably grown. These two year old bulbs are very greatly superior to the one year old in point of show; the younger ones make equally good blooms, but not nearly so many of them.

New York.

Very hot and dry weather has prevailed for some time and rain is greatly needed throughout this section. Stock planted outside requires constant watering and even then shows the effects of the dry spell. Sweet peas continue to be brought in to the city in enormous quantities but not as fine in quality as they were, most of them being short-stemmed and indicating the approach of the end of the heaviest crop. The first asters of the season are beginning to appear, the three colors pink, white and purple in about equal quantities.

Roses are very poor as a rule. A brilliant exception to the rule is the Meteor, which is coming from several growers in beautiful condition, as fresh and crisp looking as possible. Cusin is no longer pink, but is a deep red rose these days and nobody wants it with such a color. The blooms, too, are very small. There have never been so many American Beauties at this time of the year as at present. While nothing extra they are as good as could be expected, and are the only very large roses obtainable. Testout does not loom up as a great summer rose, but Augusta Victoria seems to have the requisite qualities and makes a better showing than the Bride. The Bridesmaid takes after its parent in being a very poor stunted bloom at this season.

The Florist's Club will meet on Monday evening July 31 in place of the regular August meeting, which would occur at the time when many of the members are absent in St. Louis. The rate of fare and accommodations secured by the committee on transportation for the combined trip to St. Louis and the World's Fair gives much satisfaction, and quite a number who had decided to attend the World's Fair only have concluded that, since it can be done almost as cheaply and much more pleasurably they will take in the St. Louis convention too and thus have the society of the boys on the long ride. Round trip tickets good on the special train, going and good until August 31st returning, will be on sale at the meeting on July 31, or can be obtained from the Secretary, Mr. John Young, 20 W. 24th street, who will also reserve sleeping accommodations for those who desire them.

Jackson Dawson from Boston and W. R. Smith and John Saul from Washington have been among the notable visitors in town the past week. President Smith is evidently thinking deeply on that annual address with which he will open the St. Louis convention and set the pace for his followers. He wears a look which indicates a feeling of deep responsibility equalled only by that which he bore on a certain memorable occasion when he took the bagpipes to the Soldier's Home.

Louis Fremin, of Whitestone, Long Island, committed suicide by shooting early the morning of Sunday, the 23rd inst.

Philadelphia.

"Hot duel with flowers. Pennsylvania wins the World's Fair war of the cannas. New York left far behind."

The above are the head lines of an article on cannas at the World's Fair which appeared in a recent issue of a Philadelphia paper. We quote further from the article, that each state had planted a bed 65 wide by 670 feet in length, all with cannas, and that some 8,000 plants had been used. Gardener Robert Craig, of Philadelphia, and Gardener James Dean, of Brooklyn, are the central figures in the battle. Of course our "Bob" carries off the palm, he couldn't help it. Gardener Dean should have known better than to challenge such an invincible. The article goes on to say: "Pennsylvania not only has the finest display of cannas, but she has the most superb exhibit of ferns and the most magnificent collection of caladiums in the world, and also the most comprehensive group of cacti ever transplanted from their native sandy haunts. She has in fact more flowers on display than any other state of the Union, or any of the foreign nations." Hurrah for Pennsylvania, and hurrah for "Gardener" Craig, who has done so much to make our state's exhibit what it is.

At the last meeting of the Pennsylvania Horticultural Society it was agreed to hold an exhibition next spring, probably some time during March.

A settlement has not yet been effected with the insurance companies, and the future course of the society depends upon how this matter is settled. It is believed, however, that the late fire, while it may inconvenience the society for a time, will prove a blessing in disguise and that they will emerge from their trouble stronger than ever before.

Archibald Lawson, of Chestnut Hill, is changing his system of heating from steam to hot water. He says that as he only has about 4,000 feet of glass it does not pay to have a night fireman, and as the old system does not require such close attention as steam he thinks it will be profitable to make the change.

H. A. Dreer has received a lot of Bermuda grown "Chinese" lilies; they seem to break up more than those that come from China. Lilium Harrisii are also being received and seem to be in fine condition.

Nothing has been done at this writing by the transportation committee. The

GLOXINIAS AT THE WORLD'S FAIR.

railroads seem to be afraid to commit themselves; probably some conclusion will be arrived at the coming week. As the time draws near the list of those going is increasing, and quite a respectable showing will be made by the Philadelphia delegation.

There was quite a display of flowers at the funeral of the late Mr. Drexel, the quantity being given out as some three carriage loads. Aside from work of this character trade is very quiet. Prices remain about the same as last week. Sweet peas are on the wane, while the supply and quality of asters is increasing. Carnations are quite good and fairly plentiful. Valley is to be had in quantity one week and is very scarce the next.

S. S. Pennock has been receiving some fine Meteors from Pierson, of Tarrytown; they are really fine flowers and sell for $6 per hundred.

At Henry A. Dreer's nursery in Riverton they have received an addition to their force in the person of a young man from Japan. He is a son of the president of the Gardeners' Association at Yokohama, and is quite a bright young fellow. After getting points on how they do things in America he expects to spend some time in England.

The boys have been having some enjoyable games on the alleys, which seem to be but little the worse for their soaking. The Harrisites have been doing up the Kiftites in great shape in the last two games. Such rolling at St. Louis should bring back the cup.

Anderson, of Lansdowne, is erecting two houses, each 20x100; we believe they are to be planted with roses.

Evans, of Challenge Ventilator fame, is in town and reports business first rate.

K.

Toronto.

The summer flower show of the Toronto Electoral District Society, which was held in the Pavilion, Horticultural Gardens, last Wednesday and Thursday, was a decided success and was patronized by all the elite of the city. Mr. J. P. Edwards, the energetic secretary of the society, tells me that the financial part of it was also fully up to his expectations. The large palms and other stove and greenhouse plants belonging to Sir D. L. McPherson were much missed, and I am sure Mr. Geo. Vair felt keenly his inability to bring them down. His large Kentia Belmoreana (better even than the one in the Ontario exhibit at the World's Fair) is a show of itself, a truly magnificent plant. Many other old timers also now at Chicago left a considerable vacuum in the center of the Pavilion. Not but what the floor space was all taken up and well filled with fine healthy plants of a smaller caliber. I think I never saw a lot of healthier palms and greenhouse stuff, plants that one man could lift and that would *sell*. It was the florists' opportunity, and they seized it and were with possibly the exception of Mr. J. Chambers, City Park Superintendent, the largest prize takers. Messrs. Manton Bros., J. Cotterill and J. Laing were the principal trade exhibitors of plants. A deep purple Dracæna indivisa shown by Manton Bros., a fine healthy specimen too, and the Ravenala Madagascarensis or traveler's tree shown by Mr. Geo. Reeves, of Reservoir Park, attracted lots of attention, the former mostly of the trade and the latter of the general public.

It would be taking up too much of your space to give the prize list in toto, so I will only give you the prize winner's names in some of the principal sections. Fancy caladiums, though good, were not quite up to the standard of former shows; they were shown by John Chambers, Normal Schools, and Jos. Graham (Asylum). The coleus were not up to those of former days either, they seem to get smaller every year. I suppose it takes too much room to grow them well, and they don't amount to a great deal when they are grown; they must give way to a better class of plants. The Asylum and Horticultural Gardens were the only exhibitors.

In ferns John Chambers took all the firsts (except for tree ferns where W. J. Laing came in ahead), the seconds and thirds were divided up between Messrs. Watkins (Hort. Gardens), Laing and Manton Bros. Some magnificent adiantums were shown. Orchids came out in great style from Manton Bros. and John Chambers. Saccolabium Blumei (very fine, from Manton), Cattleya Gaskelliana, C. Loddigesi, Vanda tricolor, V. cœrulea, Lælia purpurata, cypripediums in variety, etc., etc., made a good show that was much admired. John Cotterill took firsts for three palms, six palms and six palms in 8-inch pots. Manton Bros. were first with twelve very pretty well furnished palms in 6-inch pots. The palms were the principal feature of the show of course, as they always are. Cotterill and

Manton Bros. showed several very fine pieces of Cycas revoluta. Stove and greenhouse plants, flowering and foliage, were perhaps not quite up to the standard with regard to size, but the quality was very good, perhaps a little better than usual. Cotterill, Chambers, Manton Bros. and G. Reeves were the principal prize takers, with perhaps a majority of firsts for Cotterill. Mr. J. Chambers showed a grand lot of plants of the new French cannas but had no opposition.

The show of cut flowers was probably the best ever got together here; the Phlox Drummondii, petunias, annuals, roses, carnations and sweet peas being of extra quality and especially worthy of mention. Floral designs also were well represented, Mr. Charles Arnold coming in first in most of the sections, Messrs. Manton Bros. and Grainger Bros. taking the rest. A very taking bouquet made by Manton Bros. of sweet peas and gypsophila attracted much attention; that little gypsophila is one of the finest things possible for setting off a bouquet.

There was also a good exhibit of fruit, but with the exception of the hothouse grapes shown by Mr. Chambers, which looked especially nice and luscious, I am not going in to that class any further.

Another chief feature of the show which I must not forget to mention was the groups of plants 12x6, the most tastefully arranged to take the prize. There were four competitors, W. J. Laing, Cotterill, Manton Bros. and Horticultural Gardens; the prizes were given in the order named. Mr. Laing's group was put up in what may be called the bas-relief style, and was very effective. Mr. Cotterill had the best and most valuable plants in his group, but it was put up too tightly and had that clipped look about it which the group of the Horticultural Gardens had to a still greater degree. Manton Bros.' group was a very pretty loose one, but rather lacked finish.

The Gardeners' and Florists' Association met the last evening of the show and decided to have a picnic on the 9th of August in Glen Grove Park, about five miles out of town. A good time is expected. E.

Boston.

The cut flower market shows a decided improvement. Roses are scarce and in better demand. Carnations and sweet peas continue abundant and are still the main supply for the street fakirs, who buy them in large quantities and at cut rate prices. These gentlemen also get hold of most of the Mermets and La France that come in, the quality being as a rule miserable on these varieties. There is but little demand from the seaside resorts as yet.

Hardy ferns were the special attraction at the horticultural show on July 22, and some very fine collections were shown by those who are interested in this line. The first display of hollyhocks for the season came from J. S. Fay and occupied the whole table down the center of the hall. From John L. Gardner came some nice orchids, including Platiclinis filiformis, bearing fifty-six racemes of bloom, a fine Odontoglossum vexillarium and a spike of Schombergkia of a species unfamiliar to any of the orchid specialists present, the flowers being pure white with the exception of the purple lip. The display of fruit and vegetables was unusually choice.

Rosa Wichuraiana is making a great sensation at Franklin Park, where it has been planted very extensively and during the month of July has covered the rocky slopes with great masses of white bloom. To the Arnold Arboretum is due the credit for the introduction of this splendid species.

Mr. P. Welch has just returned from a vacation, during which he has done some phenomenal fishing. He very nearly caught the biggest fish that ever was seen in that vicinity, but as is invariably the case, this was the fish that got away. Mr. Welch will find lots of sympathizers who have been through it all many a time.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—By professional florist and gardener; single; permanent place. Address K W, 920 Spring Garden St., Philadelphia, Pa.

SITUATION WANTED—By experienced florist and gardener. Best of references. Private or commercial. FRANK OTTO, 583 Lincoln Ave., Chicago.

SITUATION WANTED—By young man in greenhouses, under foreman. References of leading florists in U. S. Address G H, care Am. Florist.

SITUATION WANTED—By German florist, knowledge of cut flower trade and general stock; age 27; 12 years' experience. Address Box 90, Hinsdale, Du Page County Ill.

SITUATION WANTED—By a young German florist; 8 years' experience; commercial or private. References on hand. Address O P, care American Florist, Chicago.

SITUATION WANTED—Competent to grow a general collection of cut flowers, decorative and bedding plants for a commercial establishment. Address FLORIST, 6369 Fyler Ave., St. Louis, Mo.

SITUATION WANTED—By first-class florist, commercial or private; married, small family; 16 years' experience in all branches; German. Good references. Address C D, care American Florist, Chicago.

SITUATION WANTED—By practical gardener and florist; 15 years' experience in growing fruit, flowers and vegetables; age 36; married; English. Best of references. Address TOM DAVIES, Dawder's Grove, Ill.

SITUATION WANTED—By a married man on a good private place. Many years experience in all branches of gardening inside and out. Can give good references; 3 years with last employer. Address J J, care American Florist, Chicago.

SITUATION WANTED By young man; 8 years experience in growing cut flowers and general greenhouse stock, first class designer and decorator. References given. Address G. B. K., care Fred Engel, Farina, Fayette Co., Ill.

SITUATION WANTED—As working foreman in a good place where roses, carnations, violets, bulbs, etc. are wanted in quantities. Have had charge of 5,000 feet of glass for the last four years. Can furnish first-class reference. Address FOREMAN, care W. W. Coles, Kokomo, Ind.

SITUATION WANTED: Gardener of executive ability and experience in the management and propagation of all commercial requisites connected with floriculture—ornamental, the nurseries, etc.—wishes situation accordingly. Best of references. Address A Z, care American Florist, Chicago.

WANTED—Experienced landscape gardener and florist, for private place. State wages expected. Will furnish dwelling. R. PORTER, Manassas, Va.

WANTED—A first class florist, salesman and maker up. Must be obliging and of good address. Give references and mention wages expected. Address JOHN RECK, Bridgeport, Conn.

WANTED—Man to work outside, also in greenhouse. Must be a good one. Fair salary with board and washing. ALBERT SENEFF, Menominee, Mich.

WANTED—2000 feet 1¼-inch and 600 feet 2-inch pipe one No. 7 or 8 hot water boiler. All must be in good condition and be sold cheap. JOSEPH RANCROFT, Cedar Falls, Iowa.

WANTED—Assistant gardener for a private place; 9,000 feet of glass. Must be a married man with small family. Address with references, ALB. DUEBENDORFER, Lake Geneva, Wis.

WANTED—A commercial traveler for the United States, on 10 per cent. commission, for one of the oldest and best nurseries of Ghent, Belgium. Address with references, E V C, care American Florist, Chicago.

WANTED A practical cut flower worker, either lady or gent, to take charge of my store. Must be well up in the business and furnish good recommendations. State wages expected. Address W. G. HUSCROFT, Steubenville, Ohio.

WANTED—A good all round married man, grower for retail cut flower and catalogue trade. A sober, pushing man of experience appreciated; no others need apply. State wages expected, with house and heat. Also want a young man for seed and bulb department. Address HARRY CHAAPEL, Williamsport, Pa.

FOR SALE CHEAP—25 feet of 14-inch smoke stack and 36-inch boiler front. Address McCREA & COLE, Battle Creek, Mich.

FOR SALE—The W. D. Allen greenhouses at Summerdale, Chicago. Eleven houses. Will be sold at a low price for cash. Address J. H. ALLEN, Summerdale, Ill.

FOR SALE—The rarest chance to procure a well established business. Only $300 cash required; in an excellent neighborhood. For particulars, address ISAAC A. PASSMORE, Oxford, Pa.

FOR SALE—The greenhouses, stock and good will of the old established florist business of the late T. C. Ingram. Terms reasonable. Address ALFRED HAMLIN, 1011 St. Louis Ave., Kansas City, Mo.

FOR SALE—20-horse locomotive steam boiler, 12 feet long, 24 2¼-inch tubes, steam gauge, water gauge and all fittings. Has been tested 80 pounds pressure. Price $100 cash. Address JOSEPH F. SMITH, P. O. box 140, Burlington, N. J.

FOR SALE—At a sacrifice; one of the best florist's businesses in Canada, established over 30 years; four greenhouses, with hot water heating; garden crop in high state of cultivation; no opposition; satisfactory reasons for selling. Address THOS. SINCLAIR & SON, Ingersoll, Ontario, Canada.

FOR SALE—My retail florist business at 87 and 89 W. Madison street, Chicago. Completely stocked with supplies and plants. Good horses, wagon and every thing that a first-class store needs. 42 ft. frontage of large show glass. This is no run-down business but one of the best paying in this city. Cause for selling, too much other business. Apply to T. J. CORBREY, 45 Lake St., Florists' Exchange.

FOR RENT—Three greenhouses, well stocked, one acre land and dwelling, in livest city in the south. Splendid chance for right party. Address "SOUTH," care American Florist, Chicago.

FOR RENT OR SALE—In a city of 38,000, a private place (small acre), well stocked, on street car line, one house 50x16, 20 feet high, planted with Asparagus plumosus and smilax, one house for general stock 50x16; dwelling with 7 rooms, good barn; business not overdone. Cut flowers and spring trade very good. Everything new; heated by hot water; just the place for a married man with a small capital. Rent $350 per year for three years. Owner wishes to go traveling. Address C F P, care American Florist, Chicago.

FOR SALE OR RENT—A well established florist business in western city, doing good business. $300 in cash or good security will secure it. Poor health. Address IOWA, care American Florist.

FOR SALE OR LEASE—For term of years, a good retail plant and cut flower business; 30 years established. Five small greenhouses, lot of hotbed sash tools, etc. Stock all in good condition. A rare opportunity for party with small capital to go right into business. Address E. McNALLY, Anchorage, Ky.

RARE OPPORTUNITY.

Live business, known over four states as a successful place, elegantly located, five county seat, 21 acres, rich soil, 3 steam greenhouses, 8-room dwelling, large barn, other buildings; own gas well, no cost for fuel; own water works, choice fruits. Good reasons. Will trade for improved farm. Particulars cost nothing; write. **Barnes' Garden**, box 845, Independence, Kans.

FOR SALE OR RENT.

Rose and cut flower growing plant containing about 35,000 square feet of glass; houses heated by steam and hot water; all in good condition; well stocked with roses, ferns, palms, etc. Only 18 minutes ride from center of city. If you mean business, address **FLORIST, care Chas. E. Prather, Louisville, Ky.**

FOR SALE.

WEATHERED BOILER No. 5; 900 feet 4-inch pipe.
GLASS, 500 square feet, 16x24 double.
POTS, 8 000 2¼-inch Standard, Whilldin make, 800 6-inch. Write for prices.
S. B. FIELD, Roselle, N. J.

Stock for Sale.

Greenhouses for Rent.

I will sell my stock of plants and rent greenhouses, one of the oldest places in Nashville, with about 5,000 feet of glass. Will rent low to a good man. Apply to **ALBERT BUCKWALL,** Hyde's Ferry Pike, Nashville, Tenn.

FOR SALE OR TO RENT.

The following greenhouse property, situated on the outskirts of Springfield, the City of Houses; or will sell Greenhouses, Stock and Fixtures and give ten years' lease of 2 acres land. Ten houses in all—5 houses, 30 feet wide, 65 feet long; 4 houses, 18 feet wide, 65 feet long; 1 house, 18 feet wide, 65 feet long. Steam plant! New double Florida Boiler. Stock in good condition, with a large and extra good home market. This is an opportunity in a life-time, as present owner has other interests to look after. If you are looking for a chance, apply at once to **N. D. WINTER,** 5 Elm Street, SPRINGFIELD, MASS.

H. P. ROSES,

FOR FORCING.

LEADING VARIETIES.

Order Now.

READY FOR SHIPMENT OCTOBER 1st.

Superb plants on own roots and budded on Manetti. General Descriptive Catalogue, also Wholesale Catalogue free.

Ellwanger & Barry,

Mount Hope Nurseries, ROCHESTER, N. Y.

SOME ROSES.

		2½-inch,	3-inch
PERLES	Per 100	$4 50	$7.00
METEOR, extra	"	5 00	8 00
MERMETS	"	4 00	7 00
BRIDE	"	4 00	7.00
LA FRANCE	"		7 00
ALBANY	"	4.00	7 00

BROWN & CANFIELD,

SPRINGFIELD, ILL.

ROSES.

Fine healthy stock. Per 100 P. 1000

Perles, Mermets, The Bride, Sunset, Papa Gontier, Niphetos, Bon silene, La France, Souv. d'un Ami, Duchess of Albany, Mad. Cusin, Mad. de Watteville, from 3-in. pots, $8.00 $75.00

SMILAX, from 2¼-inch pots..... 2.50 20.00

Lots of other Fine Stock.

Send for new list.

WOOD BROTHERS,

Fishkill, N. Y.

Mention American Florist.

ROSES.

Strong, healthy plants, in four inch pots, from

SELECTED CUTTINGS.

Perles, Mermets, Brides, Niphetos and Papa Gontier, $5.00 per hundred.

Cash with order.

JOHN WHITE,

Waverly Place, Elizabeth, N. J.

ROSES.

LA FRANCE, BRIDES, MERMETS, AND PERLES.

Strong, 3-inch pots, at $7.00 per 100.

LA FRANCE and ALBANY, from 2-inch pots at $4.00 per 100.

The above is good, clean stock, ready for planting.

ROBERT F. TESSON,

West Forest Park, ST. LOUIS, MO.

ROSES.

TEAS.....$30.00 per 1000

HYBRIDS..... 40.00 per 1000

Healthy plants, in 2-inch pots.

Also healthy plants of the Newest Chrysanthemums, and general greenhouse stock.

Trade list on application.

Jacob Schulz,

LOUISVILLE, KY.

ROSES,

STRONG PLANTS,

WRITE FOR PRICES.

Kemble Floral Co.,

OSKALOOSA, IOWA.

ROSES. ROSES.

STRONG FIELD GROWN PLANTS; VARIETIES SUITABLE FOR FLORISTS' USE. LARGELY

GEN. JACQUEMINOT, MRS. J. H. LAING, ULRICH BRUNNER, MAGNA CHARTA, Pr. CAMILLE DE ROHAN, PAUL NEYRON, MARSHALL P. WILDER, ANNA DE DIESBACH, ALFRED COLOMB, ETC., ETC.

A FULL ASSORTMENT OF MOSS AND HARDY CLIMBERS.

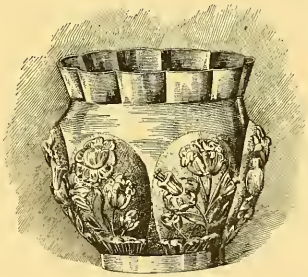
TREE ROSES. A splendid stock, fine smooth bodies, strong two year heads.

Our usual complete assortment of Trees, Shrubs, Bulbs, Plants, Etc.

CORRESPONDENCE AND INSPECTION INVITED.

THE STORRS & HARRISON CO.,

PAINESVILLE, OHIO.



Silver Cup awarded us for Meteor Roses, exhibited at Madison Square Garden, 1892, for best 25 Red Roses of any variety.

Roses for Winter Flowering.

We still have fine stocks of the two leaders,

Meteor & Mme. Caroline Testout.

ALSO

American Beauty, Bridesmaid, Kaiserin Augusta Victoria, Perle, Mermet, Cusin, Niphetos, etc.

Write us for quotations stating quantities and kinds wanted.

Our large handsomely illustrated catalogue mailed free on application.

F. R. Pierson Company,

TARRYTOWN-ON-HUDSON, N. Y.

30,000 FIRST QUALITY FORCING ROSES.

READY FOR IMMEDIATE PLANTING.

Fully equal to those sold last year, and perfectly healthy in every respect.

LA FRANCE, 3-inch pots, $9.00 per hundred; 4-inch pots, $12.00 per hundred.

MERMET, PERLE DES JARDINS, BON SILENE, SAFRANO, MME. HOSTE, MME. CUSIN,

3-inch pots, $7.00 per 100; 4-inch pots, $10.00 per 100.

SMILAX. Strong plants, 2½-inch pots, $2.50 per hundred; $20.00 per thousand.

J. L. DILLON, Bloomsburg, Pa.

FORCING ROSES.

Good stock . . . 3 AND 4-INCH POTS.

AMERICAN BEAUTY, BRIDE, MERMET, BRIDESMAID, METEOR, PERLE, SUNSET, GONTIER, LA FRANCE. . . . . .

A. S. MacBEAN, Lakewood, New Jersey.

Forcing Roses.

FINE STOCK, IN 3-INCH POTS.

Perle, Mermet, Bride, Meteor and Bennett.

GEO. W. MILLER, Hinsdale, Ill.

GONE!

This Year's Supply of

BRIDESMAIDS.

FRANK L. MOORE,

. . . CHATHAM, NEW JERSEY.

Always mention the AMERCAN FLORIST when writing to advertisers.

THE ANCHORAGE ROSE CO.

Offers a select lot of young Rose plants. Grown from imported stock. Free from disease. All the popular forcing varieties.

SEND FOR PRICE LIST. . . . . .

ANCHORAGE ROSE CO., Anchorage, Ky.

YOU CAN never invest $2 to better advantage than in a copy of our trade directory and reference book.

THE AMERICAN FLORIST

Subscription $1.00 a Year. To Europe, $2.00.

Advertisements, 10 Cents a Line, Agate; Inch, $1.40; Column, $14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 6 times, 5 per cent; 13 times, 10 per cent; 26 times, 20 per cent; 52 times, 30 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements must reach us by Monday to secure insertion in the issue for the following Thursday.

Address THE AMERICAN FLORIST CO., Chicago.

Buffalo.

Buffalo is suffering sadly for want of rain; we have scarcely had enough in eight weeks to lay the dust. While surrounding towns in all directions have been favored with an occasional soaking we have been left out in the dry. This is telling very much on outside flowers, except where the hose can be kept at work, and that is not equal to a good rain. Sweet peas will soon be gone. Carnations that have been very plentiful here this summer will soon be scarce. Growers are very apt to neglect them when the price gets away down. They leave hundreds of blooms on the plants to wither, don't keep them syringed or watered and soon there is a collapse of the whole plant. It pays well to attend to them, for they are always very scarce in August and September.

There is great excitement here over the coming base ball game with the Rochester boys this week. Richard Salter and his alleged ball tossers will arrive in this city via N. Y. C. R. R. early in the morning on a special vestibuled Wagner train. Poor fellows, they will go home under very different conditions from what they came.

The writer had the honor of officiating as judge once again at the midsummer show at beautiful Toronto. In spite of the absence of much of the finest decorative stuff, which is now at Chicago, there was a good all round show. The Toronto men always seem well up in fine ferns. All old friends were found well, hearty and hospitable as ever.

All florists who intend to build this summer and are within 200 miles of Toronto should see those grand new houses just built and planted by John H. Dunlop. There is not an ounce of waste lumber in them, and they strike one as being about perfection, but there is not the slightest evidence to show they will grow roses any better than a new house of equal span. In spite of their fascinating appearance I am pretty sure they will not be as light in the dark days as an equal span built at an angle of 43° to 45°. But there is one advantage about them; you can build as many as you want all attached without the slightest shade. A very good friend of the writer's is about to build two carnation houses, each 125x20; one will be equal span, the other short span to the south. The same soil will be used, the same temperature for both, and the same brains control the two; that will be a test. A new house of a new pattern against an old house of another style is no fair test. The genial John is blessed with the same amount of vim, snap and energy as ever. W. S.

NEXT WEEK comes our Convention Number and Columbian Souvenir, and it will be a beauty.

"JACQ" ROSES the Year Around.

We are now Cutting THOUSANDS DAILY of

* METEOR ROSES *

The finest Crimson Summer Rose, equal to "Jacq" in color and far superior in keeping qualities. Can supply it in quantity at all times. Prices on application.

F. R. PIERSON COMPANY,
TARRYTOWN-ON-HUDSON, NEW YORK.

THEY SAY That ASPARAGUS PLUMOSUS NANUS

at 50 cents a string, 8 to 12 feet in length, is the cheapest and best material for decorating, as it will stand longer and look better than any other green in this hot weather.
ORDER IN LARGE OR SMALL QUANTITIES, FROM

W. H. ELLIOTT, Brighton, Mass.

FIELD GROWN CARNATIONS.

Fine healthy plants for Winter Bloom.

W. R. SHELMIRE,
CHESTER CO., AVONDALE, PA.
Send for Circular.

CARNATIONS.

A SPECIALTY.

Full stock of all the new and leading varieties. Rooted Cuttings, Young Plants, and Field Grown Plants in season. Get our prices before purchasing.

GEO. HANCOCK,
GRAND HAVEN, MICH.

CARNATIONS

Rooted Cuttings all sold or planted out.

FIELD GROWN PLANTS IN SEASON.

Correspondence Solicited.

C. J. PENNOCK, THE PINES,
Chester Co., KENNETT SQUARE, PA.

CARNATIONS
ALL
THE LEADING VARIETIES.
R. T. LOMBARD,
Wayland, Mass.

CATALOGUE PRINTING.
ELECTROTYPING.

Done with expert ability for Florists Nurserymen, Seedsmen. Write to

J. Horace McFarland Co.,
HARRISBURG, PA.

CUT BLOOMS OF ASTERS,

Carefully packed and shipped at short notice. Price, $1.00 per 100.

Address J. G. BURROW, Fishkill, N. Y.

CUT SMILAX,

15 cts. per string till November 1st. Quality first-class. Special attention to orders by wire.

J. E. BONSALL & SON, 308 Garfield Ave., Salem, O.

WHOLESALE FLORISTS

N. E. CORNER
13th & Chestnut Sts.,
PHILADELPHIA.

SAMUEL S. PENNOCK,
Wholesale Florist
REMOVED TO REAR OF 42 S. 16th ST.,
Philadelphia, Pa.

THE SMILAX KING!

Who? KOFFMAN,
Where? WALDEN, Orange Co., N. Y.

What? SMILAX

25c. a string; 20c. a string by the hundred; 18c. a string by the thousand.

When? ALL THE YEAR AROUND.

And he pays the Express.

HARDY CUT FERNS
LAUREL FESTOONING, ETC.

The only place in the world where you can Always get them,

H. E. Hartford,
18 Chapman Place, BOSTON, MASS.

Our Supply of
CYCAS LEAVES,
ASPARAGUS VINE,
AURATUM LILIES,
is large, let us supply you.
WISCONSIN FLOWER EXCHANGE,
131 Mason St., Milwaukee, Wis.

Please mention the American Florist every time you write any of the advertisers on this page.

E. H. HUNT,
WHOLESALE FLORIST
79 Lake Street, CHICAGO.

	Per 100
Perle, Niphetos, Gontier	$2.00@$3.00
Brides, Mermets, La France	3.00@ 4.00
Meteors	5.00
Carnations, short	.50
" long	1.00
Adiantum	1.00
Valley	3.00
Smilax	12.50@16.00
Ferns, common, 30c. per 100; $2 50 per 1000.	

Kennicott Bros. Co.
WHOLESALE CUT FLOWERS,
34 & 36 RANDOLPH STREET,
CHICAGO, ILL.
WIRE WORK A SPECIALTY.

A. L. RANDALL,
Wholesale Florist and Dealer in
FLORISTS' SUPPLIES,
126 Dearborn Street, CHICAGO.
Store Closes Nights 9 P. M.; Sunday 2 P. M.

NILES CENTER FLORAL CO.
Incorporated.
WHOLESALE GROWERS OF
CUT FLOWERS of ALL KINDS
and Dealers in FLORISTS' SUPPLIES.
CHAS. W. McKELLAR, Mgr.
In Chicago Cut Flower Exchange.
45 Lake St., CHICAGO.

M. OLSON,
Wholesale **FLORIST,**
66 WABASH AVENUE,
Telephone 4786. CHICAGO, ILL.

T. J. CORBREY,
Wholesale and Commission
FLORIST,
45 Lake St., CHICAGO, ILL.
In Chicago Cut Flower Exchange. . . .

A. G. PRINCE & CO.,
Wholesale and Commission
FLORISTS,
45 LAKE STREET,
In Chicago Cut Flower Exchange. CHICAGO.

DAN'L B. LONG,
COMMISSION • FLORIST,
495 Washington St., BUFFALO, N. Y.
FORCING BULBS, FLORISTS' SUPPLIES,
LONG'S FLORISTS' PHOTOGRAPHS.
Lists, Terms, &c. on application.

H. L. SUNDERBRUCH,
WHOLESALE FLORIST
4TH & WALNUT STREETS,
Cincinnati, O.

Wholesale Markets.

Cut Flowers.

NEW YORK, July 25.

Roses	1.00@ 3.00
" Beauty	5.00@15.00
Carnations	.25@ .50
Valley	3.00@ 4.00
Sweet Peas, per 100 bunches	.50
Asters	1.00
Adiantums	1.00
Smilax	15.00

BOSTON, July 25.

Roses	3.00@ 4.0
Carnations	.35@ 1.00
Lily of the valley	3.00@ 4 00
Ferns, per 1000	.25@ .35
Coreopsis, cornflower	.50
Asters	1.00
Adiantum	1.00
Smilax	12.50
Asparagus plumosus	50.00

PHILADELPHIA, July 25.

Roses	2.00@ 3.00
" Beauties	15.00@20.00
" Meteors	6.00
Carnations	.75@ 1.00
Asters	1.00
Sweet peas	.25@ .50
Gladiolus	5.00
Valley	4.00
Pond lilies	.50
White hollyhocks	.75@ 1.00
Balsams	.25@ .50
Adiantum	.75@ 1.00
Smilax	15.00
Asparagus	50.00

CHICAGO, July 25.

Roses, Perles, Guillot, Niphetos	2 00@ 3.00
" Albany, Bride	3.00@ 4.00
" Meteor	5.00
" Beauties	8.00@10.00
Carnations	.50@ 1.00
Sweet Peas	.15
Auratum	8.00@10.00
Gladiolus, longiflorum	6.00@ 8.00
Cornflowers	.20
Asters	1.00
Hollyhocks, white	1.00
Valley	1.00@ 3.00
Smilax	12.00@15.00

Peck & Sutherland,
Successors to WM. J. STEWART,
Cut Flowers AND Florists' Supplies
WHOLESALE.
67 Bromfield Street, BOSTON, MASS.

WHOLESALE FLORISTS,
JOBBERS IN . . .
. . FLORISTS' SUPPLIES,
FLORISTS' VASES.
METS, BRIDES, GONTIERS, CARNATIONS, ALWAYS ON HAND.
1 Music Hall Place,
BOSTON, MASS.
HORTICULTURAL AUCTIONEERS. . .

WELCH BROS.,
Wholesale Florists,
NO. 2 BEACON STREET,
Near Tremont St., BOSTON, MASS.
Mention American Florist.

SURPLUS OF BEDDING ROSES.
From 2, 2½ and 3 inch Pots, Niphetos, Perle, Sunset, Mermet, Bride, La France, Albany, Am. Beauty, Meteor, Mad. Hoste, White La. France, M. Neil and Smilax.
Low prices given on application.
Samples sent free by mail.
JOSEPH HEINL, Jacksonville, Ill.

When writing to any of the advertisers on this page please mention the American Florist.

BURNS & RAYNOR,
49 West 28th Street,
NEW YORK,
WHOLESALE DEALERS IN AND SHIPPERS OF
Choice Flowers.

WALTER F. SHERIDAN,
WHOLESALE
FLORIST,
32 West 30th Street, NEW YORK.
Roses Shipped to all Points. Price list on application.

HUNTER & PURDY,
WHOLESALE DEALERS IN
CUT FLOWERS
51 W. 30th St., NEW YORK.
FRANK D. HUNTER. JAMES PURDY, Formerly 112 W. 40th St

JAMES HART,
WHOLESALE FLORIST,
117 W. 30TH ST., NEW YORK.
The Oldest Established Commission House in N. Y.
LARGE SHIPPING TRADE. CAREFUL PACKING.

THEO. ROEHRS,
WHOLESALE
FLORIST,
111 WEST 30TH STREET,
NEW YORK CITY.
Established 1879. . . . .

MILLANG BROS.,
Wholesale Florists,
17 WEST 28TH STREET,
NEW YORK.
BRANCH: Cut Flower Exchange, 408 E. 34th Street.

MICHAEL A. HART,
Wholesale AND Commission Florist
113 WEST 30TH STREET,
. . . NEW YORK.
THE FINEST ROSES AND CARNATIONS.
Branch, at Cut Flower Exchange, 408 E. 34th St.

EDWARD C. HORAN,
34 W. 29th Street, NEW YORK,
Wholesale Florist
Careful Shipping to all parts of the country.
Price list on application.

C. A. KUEHN,
(Successor to ELLISON & KUEHN),
WHOLESALE
FLORIST,
1122 PINE STREET,
St. Louis, Mo.
A complete line of Wire Designs.

W. ELLISON,
WHOLESALE
Cut Flowers AND Florists' Supplies
1402 PINE STREET,
St. Louis, Mo.

The Seed Trade.

AM. SEED TRADE ASSOCIATION.

J. C. VAUGHAN, Chicago, president; A. L. DON, New York, secretary and treasurer. The eleventh annual meeting at Chicago, August 14 to 16, 1893. Applications for membership should be addressed to Wm. Meggatt, chairman membership committee, Wethersfield Conn.

Seed Trade Association.

Eastern members expecting to attend the annual meeting in Chicago are cordially invited to join the Society of American Florists excursion which leaves New York and Boston on Monday August 7, and attend the convention of the society at St. Louis before proceeding to Chicago. A good time is assured.

WM. J. STEWART, Sec'y. S. A. F.

MR. FRANK T. EMERSON is making a trip through the east.

MISS FLORENCE VAUGHAN of Chicago, is visiting friends in New York.

MR. J. COMONT, representing Carters of London, is expected to arrive at New York the present week.

MR. WARREN RAWSON, of Arlington, Mass, father of the well known seedsman, died on July 22, at the age of 72.

THE Northrup, Braslan & Goodwin Co., of Minneapolis, are overhauling and generally remodelling their retail store.

ELGIN, ILL.—The assets of the Ricker Nursery Co., recently assigned, are now said to be $26,000 instead of $60,000 as at first reported.

MR. ALONZO B. GARRETSON, the well known seedsman of Flushing, N. Y., died on July 17. His death was due to rheumatism which he contracted during the war.

QUITE A NUMBER of the eastern seedsmen propose to accompany the S. A. F. excursionists to St. Louis, going thence to Chicago to attend the meeting of the Seed Trade Association.

NEW YORK.—The early arrivals of Roman hyacinths appear to be of fine quality. Lilium Harrisii are somewhat inferior. Quite a lot of Romans and Chinese narcissus are being received from Bermuda. If the bulbs turn out successfully, Bermuda will prove a formidable rival for the European growers of these bulbs.

VISITED CHICAGO: F. R. Pierson, Frank S. Platt, Prof. Dr. L. Wittmack, Berlin.

Chicago.

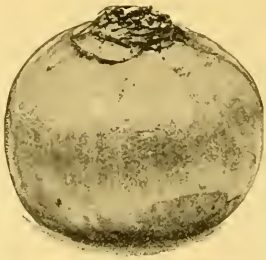
Last week business was fair considering the season; in fact, in spite of hot weather trade has been, so far, rather better than the summer average. Flowers are generally plentiful, excepting carnations, which are now scarce, but if the drouth continues we are likely to see a deficiency in outdoor blooms. Roses continue about the same as last week; Beauties are increasing in quantity, but a good many from young stock are short-stemmed. Perles are very good, still many roses are rather small. Meteor is small, and opens very quickly, but it is the only rose of its color to be had.

Sweet peas are still plentiful, and the demand is falling off; people do not seem to want them. They average $1.50 a thousand. Asters are limited in quantity; the white ones sell quickly, but there is no demand for colored. Auratum lilies are much overstocked, and sell slowly. White hollyhocks sell better since carnations became scarce. Some very good valley is in, but it does not bring a high price. Indeed, prices can hardly be fixed now; they vary from day to day, though the tendency is a little stiffer than two weeks ago.

The firm of Schiller & Mailander, composed of Herman Schiller and Otto Mailander, has been dissolved. Mr. Schiller takes the West Madison street store and will continue to conduct same, while Mr. Mailander takes the Niles Center establishment and the wholesale department of the business.

Recent visitors: Prof. Dr. L. Wittmack, editor of *Gartenflora*, of Berlin, Germany; F. R. Pierson, Tarrytown, N. Y.; T. J. Lang, New York; J. K. Allen, New York; J. A. Kramer, Cedar Rapids, Iowa; J. B. Heiss and wife, Dayton, O.; T. Miller, Chillicothe; O.; J. M. Cole, Peoria, Ill.; Andrew Washburn, Bloomington, Ill.; N. Bommersbach, Decatur, Ill.; J. M. Gift, Memphis, Tenn.; J. R. Hellenthal, Columbus, O.; L. J. Stuppy, St. Joseph, Mo.; H. J. Millatt, Buffalo, N. Y.; A. Y. Ellison, St. Louis, Mo.; J. H. Brazendale, London, England.

Thos. W. Weathered's Sons, of New York, have opened a Chicago office in the Manhattan Building, with Mr. Wm. Jenkins in charge.



Roman Hyacinths,
P. W. Narcissus,
Harrisii, Freesia,
ETC.
NOW READY.

ROSES FOR FORCING.
PERLES, BRIDES, LA FRANCE, ETC., per 100 $5.00; per 1000 $45.00.
Special C. SOUPERT, 2½-inch, fine stuff, per 100 $3.50; 3½-inch, per 100 $8.00.

VAUGHAN'S INTERNATIONAL PANSY MIXTURE, Ready August 1st, is a World Beater.

Vaughan's Seed Store,
148 W. Washington St., CHICAGO. 26 Barclay St., NEW YORK.

HOW TO GROW CUT FLOWERS.
A PRACTICAL TREATISE ON
THE CULTIVATION OF THE ROSE,
And Other Flowering Plants for Cut Flowers, sent to any address upon receipt of $2.00. M. A. HUNT, Terre Haute, Ind.

C. STOLDT,
CYCLAMEN GROWER,
WANDSBEK-MARIENTHAL, near Hamburg, GERMANY,
Offers CYCLAMEN SEED, SHOLDT'S HYBRIDS, First-class seed, are acknowledged to be unsurpassed by all authorities in Europe, at the following prices, including postage:

Bright dark red	per 100 corms,		50 cts.
Rose of Marienthal	"	"	50 cts.
Katchen Stoldt, pure white	"	"	75 cts.
White, with carmine eye	"	"	35 cts.

CASH WITH ORDERS.

Always mention the American Florist when writing to advertisers.

SEND for Catalogue of JAPAN BULBS, SEEDS and SHRUBS, ARAUCARIAS, TREE FERNS, AUSTRALIAN PALM SEEDS, CALIFORIA BULBS and SEEDS to
H. H. BERGER & CO.,
Established 1878. SAN FRANCISCO, CAL.

HEADQUARTERS for WATER LILIES
SEEDS, TUBERS AND PLANTS, ready for shipment at all seasons and to all parts of the world. Don't fail to inspect our Columbian Exhibit at the World's Fair.
Illustrated Catalogue on application.
WM. TRICKER. DONGAN HILLS NEW YORK.

DO YOU KNOW . .
THAT YOU CAN GET
20 CANE STAKES FOR 1 CENT
A foot in length by simply using a sharp saw on a bundle of our best.
BRACKENRIDGE & CO.,
304 W. Madison St., BALTIMORE, MD.

ROSE STOCK.

	Per 100
We have 250 Pearls, 4-in	$6.00
100 Mermets, 4-in	6.00
Brides, 3-in	5.00
Brides, 4-in	6.00

POHLMAN BROS.,
512 N. Clark St., Chicago, or Morton Grove, Ill.

BULBS! BULBS!
Lilium Auratum, Spec. Rubrum, Spec. Album Longi florum, etc. Order now.
Callas, Callas, at lowest rates: Fresh Cut Cycas leaves, prices and sizes to suit all. Fresh imported Cycas, lowest prices. Camellias, Paeonias, Japan Maples, and for general Japanese stock seeds. Remember we guarantee sound delivery, still goods travel at owner's risk. Apply to
F. GONZALEZ & CO.,
Nursery and Greenhouses, 303 to 312 Wayne Street, SAN FRANCISCO, CAL.

WATER HYACINTHS.
$1.00 a dozen; $4.00 a hundred.
WATER POPPIES, 75 cts. a dozen.
MRS. A. E. DAVIDSON, Terry, Hinds Co., Miss.

Z. DE FOREST ELY.

BULBS FOR FLORISTS' USE.
THE FINEST QUALITY.
THE MOST POPULAR PRICES.
THE MOST LIBERAL TERMS.

We Want YOUR Trade.

CATALOGUE FREE TO ALL ON APPLICATION.

SEND LIST OF YOUR WANTS FOR SPECIAL PRICES.

NOW READY.	Per 100.	Per 1,000.
LILIUM HARRISII, 4 to 5	$ 2.50	$20.00
" " 6 to 7	3.00	25.00
" " 7 to 9	5.50	50.00
" " 9 to 12	10.00	90.00
LILIUM CANDIDUM, Selected	3.00	25.00
WHITE CALLA (Dry Bulbs)	7.00	
" " Extra Selected	10.00	

NOW READY.	Per 100.	Per 1,000.
WHITE ROMAN HYACINTHS, 11 x 12	$2.00	$16.00
" " " 12 x 15	2.50	21.00
PAPER WHITE NARCISSUS	1.00	7.50
" " " Grandiflora	1.25	10.00
FREESIA REFRACTA ALBA, Extra Selected	1.00	7.00
LILY OF VALLEY, (our extra Berlin Pips now in cold storage and for immediate delivery)		12.00

Finest stock of DUTCH HYACINTHS, TULIPS, VON SION NARCISSUS, SPIRAEA, etc., ready in September.

Address— **Z. DE FOREST ELY & CO.,** Wholesale Bulbs, Growers and Importers,
1024 Market St., PHILADELPHIA, PA.

P. O. BOX 1176. TELEPHONE 3415. REGISTERED CABLE ADDRESS, DE FOREST, PHILA.

Freesia refr. alba.

READY NOW. Samples mailed free.

	Per 100	Per 1000
SELECT BULBS	$ .75	$5.00
EXTRA SELECT BULBS	1.00	8.50

W. W. BARNARD & CO.,
6 and 8 North Clark Street, CHICAGO.

We make special import prices on
ROMANS, LILIUM HARRISII, NARCISSUS, HYACINTHS, TULIPS, VALLEY PIPS, and all other FORCING BULBS. . . . . .

Let us know your wants and get our prices.
Mention American Florist.

HULSEBOSCH BROS.,
BULB AND PLANT GROWERS,

OVERVEEN, near Haarlem, HOLLAND.

	Per 100	1000
Lilium Harrisii, 4 to 5-inch in circ.	$2.20	$19.00
" " 5 to 7-inch in circ.	3.00	24.00
" " 7 to 9-inch in circ.	5.25	47.00
" " 9 to 12-inch in circ.	11.00	100.00
Lilium Longiflorum 10 per cent dearer than Lilium Harrisii.		
Roman Hyacinths, extra selected	2.50	22.00
" " top roots	3.00	25.00
Narcis. Totus Albus, extra selected	1.00	7.50
" " " Grandiflor'm, ext. s'le'd	1.30	11.00

Fall Wholesale Catalogue now ready. Address

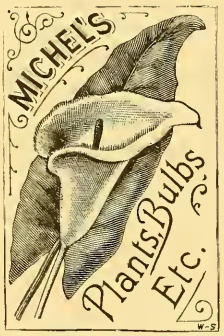
A. HULSEBOSCH,
P. O. Box 311B. Warehouse 58 West Street,
NEW YORK CITY.

Choice Lily of the Valley Pips.

Ernst Reimschneider, Altona, Hamburg.

For Fall Importation. Catalogues free on applica on to his sole agents.

C. C. ABEL & CO., P. O. Box 920, New York.
Mention American Florist.



Write for Wholesale List.
MICHEL PLANT AND BULB CO.,
ST. LOUIS, MO.

G. J. MOFFATT,

Manufacturer of

PAPER BAGS AND ENVELOPES

Special attention given to
Seed Bags and Catalogue Envelopes.
NEW HAVEN, CONN.
Mention American Florist.

Lily of the Valley Bulbs.

OSCAR KNOPFF & CO., Erfurt, Germany.

Seed growers to H. H. the Emperor of Germany.

Very BEST Hamburg and Berlin qualities, 3 years old, for forcing.

For particulars apply to

C. B. RICHARD & CO., AGENTS,
61 Broadway, NEW YORK.

Always mention the American Florist when writing to advertisers.

ONION SEED

OUR SPECIALTY.

Grown from selected Onions and the purest stock in the United States.

1893 CROP 1893

Yellow Globe Danvers,
Yellow Flat Danvers,
Extra Early Red,
Wethersfield.
} Write for Prices.

COX SEED AND PLANT CO.

SAN FRANCISCO, CAL.
Mention American Florist.

Choice Dutch Bulbs

AND NEW VARIETIES OF ATTRACTIVE BULBOUS PLANTS, GROWN BY

C. G. VAN TUBERGEN, JR.,
Haarlem, Holland.

For Fall Importation, catalogues free on application to his sole agents

C. C. ABEL & CO., P. O. Box 920, New York.

We Sell Bulbs!

Special Prices on Application.

Weeber & Don

Seed Merchants and Growers,
114 Chambers St., NEW YORK.

When you write to any of the advertisers in this paper please say that you saw the advertisement in the American Florist.

St. Louis.

Trade during the past week appears to be somewhat better, owing probably to the slackening up of receipts. Funeral work is the standby of the trade at this season. The stock coming in is very good for this time of the year, some Mermets noted being exceptionally well colored. Outside of Perles, Niphetos, Mermets and Wootons the stock of roses amounts to very little. There is a good supply of outdoor flowers which go fairly well.

At the regular meeting of the bowling club on Monday evening a cup was selected to be competed for at the contest in August, although the conditions have not as yet been fully decided upon. So far very few teams have signified a desire to compete and it is hoped that all able to do so will come prepared to bowl. Information regarding the proposed contest can be had by writing the secretary, Mr. Chas. Young, 1406 Olive street.

The exhibition committee have during the past week closed with the Exposition managers for the use of the Grand Music Hall for the chrysanthemum show, upon very favorable terms. Within twenty-four hours of the closing a representative of an opera troupe appeared upon the scene asking for the same dates at an increased figure. He was referred to the chairman of the committee, who after seeing the lay of the land called his colleagues together and they came to the conclusion that if the opera company were willing to pay for the dates they could have them, the club taking the succeeding week. The sum asked for making the change of dates is $400. As yet the answer has not been returned, but is expected shortly. It is to be hoped the change will be made, as the weather at that time of the year is as liable to be pleasant the latter as well as the former part of the month, and the plants can be had in just as good shape as a week earlier. R. F. T.

YOU CAN'T AFFORD to do business without a copy of our trade directory and reference book.

Swainsona galegifolia alba.

Nice young plants in 2¼in. pots, $3.00 per dozen. STOCK LIMITED.

EDWIN LONSDALE,
WYNDMOOR, near Chestnut Hill, PHILADELPHIA.
Money Order Office, Station "G," Phila.

SMILAX.

A large stock of strong well grown plants from 2¼-inch pots, at $2.00 per 100; $18.00 per 1000.

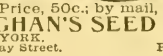
PANSY PLANTS for fall. Choicest strains.

CYCLAMENS, both 1 and 2 year bulbs. Prices on application.

CLEMATIS, large flowering for fall delivery. A very large stock and assortment. Write for prices. I can suit you both on plants and prices.

F. A. BALLER, Bloomington, Ill.

Vaughan's Solid Steel Trowel.

THE BEST IN THE WORLD.  NEVER WEARS OUT.

Price, 50c.; by mail, 60c.

VAUGHAN'S SEED STORE,
NEW YORK. 26 Barclay Street. CHICAGO. P. O. Box 088.

Celery Plants.

2,000,000 WHITE PLUME, $1.25 per 1,000. Cash with order. Samples mailed free upon application.

C. M. GROSSMAN, Wolcottville, Ind.

TUBEROUS ROOTED BEGONIA PLANTS.

STRONG, YOUNG POT GROWN PLANTS.

Ready to bloom. Will make fine plants for fall sales. In 4 colors. Price, $12.00 per 100.

F. R. PIERSON COMPANY,
TARRYTOWN-ON-HUDSON, N. Y.

You Must be Thinking

Now about the pot-grown Strawberry Plants you will need for your trade this summer. We will have them in leading varieties after July 1, at $18.00 per 1000. $15.00 in large orders. We can ship at once. NO WAITING.

Rogers' Nurseries, Oldest in the State Moorestown, N. J.

Siebrecht & Wadley,

ROSE HILL NURSERIES,

NEW ROCHELLE, N. Y.

Palms, ORCHIDS Roses, and New Plants.

FRESH DRACAENA CANES NOW READY.

ORCHIDS.

The Finest Stock in the World.

SANDER'S, ST. ALBANS, ENGLAND.

Thirty minutes from London.

Our Mr. A. Dimmock will be pleased to interview buyers or reply to any communication addressed to him at 205 Greenwich Street, New York City

Established and Imported

ORCHIDS.

Ig. FORSTERMAN,
Newtown, N. Y.

Association "Flora"

BOSKOOP, HOLLAND

NURSERIES.

Roses, Clematis, Shrubs, Azaleas, Palms, Herbaceous Plants, Bulbs, Etc.

Catalogue on Application.

P. OUWERKERK,
206 Cambridge Ave., JERSEY CITY, N. J.

E. G. HILL & CO.,

Wholesale Florists

RICHMOND, INDIANA.

CHOICE SWEET PEAS

Being the largest growers of the above in the world the trade are invited to send a list of their requirements and secure low prices for Fall delivery.

SHERWOOD HALL NURSERY CO.
Menlo Park and San Francisco, Cal.

Please mention the AMERICAN FLORIST every time you write to an advertiser.

Auguste van Geert, Ghent, Belgium.

(ESTABLISHED 1808.)

K. J. KUYK,
SUCCESSOR.

Special Culture for the Trade.

ANDROMEDA JAPONICA, CROTONS,
ANTHURIUMS. DRACÆNAS,
ARALIA KERKHOVEANA, ERICAS.
" SIEBOLDII, EURYA LATIFOLIA,
" VEITCHII, LILACS FOR FORCING
ARAUCARIAS, METROSIDEROS SEMP.,
ASPARAGUS PLU. NANUS, OPHIOPOGON Jaburan. l.v
ASPIDISTRA, ORCHIDS,
AZALEAS. PALMS,
BAY TREES. PANDANUS,
CAMELLIAS, RHODDDENDRONS,
And full strain of Rare Plants and Novelties

BULB FARMS AT HILLEGOM, HOLLAND.

☞Ask for catalogue and prices, if not already received.

(ESTABLISHED 1850).

Edmund Van Goppenolle

NURSERYMAN,
MEIRELBEKE, NEAR GHENT, BELGIUM.

Great Culture of Aspidistra, Araucaria Excelsa. PER 100.
Azalea Indica (20,000 disposible), at $20, 25 and 30 PER 1000.
Begonia Tuberous, Best Sorts, 200,000 yearly, at $18
Dracæna, Ferns, Ficus Elastica, Glovinia, - - $22
Hydrangea Paniculata, Laurus Nobilis (Sweet Bays), Many thousand pairs from all sizes, in Crowns and Pyramids, Lilium, Palms, enormous choice in all kinds at reduced prices. Rhododendron Hybr. Spiræa Japonica.
Price list on application; also to my agents.

C. C. ABEL & CO.,
P. O. BOX 920, NEW YORK.

FERNS.

Nice, strong plants for ferneries, from 6 to 12 inches high.

DAVALLIA STRICTA,
PTERIS ARGYRA (VARIEGATA),
PTERIS SERRULATA CRISTATA,
POLYPODIUM AUREUM,

In mixture only, $6.00 per hundred.

S. J. REUTER, Westerly, R. I.

TRY DREER'S GARDEN SEEDS,

Plants, Bulbs & Requisites. They are the best at the lowest prices. Trade List issued quarterly, mailed free to the trade only.

HENRY A. DREER,
Philadelphia, Pa.

When writing to any of the advertisers on this page please mention the American Florist.

ALBERT M. HERR,

FLORIST,

L. B. 496.

Lancaster, Pa., August 1st, 1893

Fellow Florists,

Greeting:-

To those of you whom I do not get to see at the convention, I beg to announce that my Pansies will soon be ready for sale; they will be nice, stocky, little plants grown from seed of my own raising. I have, through careful selection and hybridization produced a strain of pansies that my customers tell me are the finest in the country. The price, quality considered, is very reasonable, 75 cts. per 100 or $5.00 per 1000. Try at least a hundred for comparison with other strains you grow.

In Carnations, I will have a large stock of the best sorts only. They will be grown so as to produce good, healthy cuttings; these cuttings will be well rooted and offered to the trade at a fair price. I will be pleased to correspond with you any time you wish to talk carnation cuttings, and think I can offer some inducements to deal with me.

My Smilax is all sold for this season and it may seem rather far fetched to talk about some that will be ready next Feb., but it is well to know that you can get good little plants for $6.00 per 1,000 then.

I will also handle miscellaneous stock for my father, D. K. Herr, all of which will be advertised in due season. Look for my name among the advertisers when in need of stock.

Respectfully yours,

L. B. 496 ALBERT M. HERR.

Terms cash with order or C. O. D.

Baltimore.

Here is a list of prices from the blackboard at the Exchange, by which it will be seen that some things are still handled in quantities to justify putting prices on them. Perles $3 per hundred, La France $3 to $4, Mermet $3 to $4, Brides $3 to $4, carnations 50 cents per hundred, hollyhocks 50 cents per hundred, sweet peas 30 cents per hundred, smilax 20 cents per string.

The lowest rate yet secured to St. Louis and back via Chicago is $37.50, and if that were all the cost of the trip no doubt we would muster a crowd at the convention, but running expenses would easily double that, and then there is the time consumed, the greatest expense of all, so we may be glad if represented by only a very moderate minority of the club.

The weather remains sultry and the soil is getting very dry; as a natural consequence outdoor flowers are falling off in quality though the supply is still good.

MACK.

MINNEAPOLIS, MINN.—Mr. R. J. Mendenhall has returned from the Pacific coast in improved health and spirits.

COSHOCTON, O.—M. J. Schott is preparing to build a new house 11x61. He reports business as excellent this season.

CONNERSVILLE, IND.—C. A. Rieman has put in a new 25-horse power boiler. He expects to add several new houses this season.

POTTSTOWN, PA.—Edwin Wickersham & Son is the title of a new firm here. They have built two houses, each 20x100, and will add others later.

WHEN writing our advertisers please use one of your printed business letter heads or enclose your business card.

SMILAX.

	Per 100	Per 1000
From 2½-inch pots	$3.00	$25.00
" 2-inch pots	2.50	20.00
" Thumbs	2.00	15.00

Also a limited quantity of PANDANUS UTILIS and LATANIA BORBONICA, strong plants, from 4-inch pots. Price on application.

NATHAN SMITH & SON,
167 W. Maumee St., Adrian, Mich.

25,000 Smilax Plants
FOR THE MONTH OF AUGUST.
In order to make room I offer extra fine strong SMILAX PLANTS, out of 2-inch pots, for $12 50 per 1000. (500 at 1000 rate); $1.50 per 100. Terms strictly Cash. Plants will be packed light, and satisfaction guaranteed. Samples will be sent on receipt of 10c. stamps.
FRED SCHNEIDER, Wholesale Florist,
Wyoming County, ATTICA, N. Y.

SMILAX.
First-class, from 2½-inch pots, $2.50 per 100; $20.00 per 1000. Sample free.
Address J. G. Burrow,
FISHKILL, N. Y.

MARIE LOUISE VIOLETS
Field grown plants. Fine stock.
PER HUNDRED $10.00
PER THOUSAND 80.00
500 at 1000 rate.
C. R. KNAPP,
P. O. box 62. NEW HAMBURGH, N. Y.

PLANTS OF
Asparagus plumosus
STRONG 3-YEAR OLD ROOTS.
Just the kind for making strings in a hurry. Large enough to divide up and still have big plants.
$10.00 PER DOZEN; $75.00 PER HUNDRED.
JOHN BURTON, Chestnut Hill, Philadelphia.

PANSIES.
THE BEST ARE THE CHEAPEST.
SIZE is a strong point in Pansies; when you combine size, color, substance and form they are pretty near right. By careful hybridization and selection I have accomplished this, and the Pansies I send out this Fall will be an agreeable surprise, even to former customers. If you buy Pansies I would be pleased to correspond with you; they will be offered for sale from Aug. 20th to Dec. 1st, at 75c. per 100 or $5 per 1000. Terms cash with order or C. O. D. No seed for sale.
L. B. 496. ALBERT M. HERR, LANCASTER, PA.

ZIRNGIEBEL'S
Giant Market and Giant Fancy
PANSIES,
are without question the most popular strains in cultivation up to date.
New Seed ready now, in trade packages of either strain, at one dollar each.
Denys Zirngiebel,
NEEDHAM, MASS.

PANSY SEED. PANSY
The Jennings strain of large flowering and Fancy Pansies, new crop now ready, 8 pounds of seed and over 500,000 plants were sold last season. This strain is popular, and why? Because Florists can depend on getting only First Class Stock. I shall sell no other. My aim is to supply the best Finest Mixed, all colors, trade pkt. 500 seeds 25c.; 1000 seeds 50c.; 2000 seeds $1.00; per ounce $6.00. Pure White (the finest) trade pkt 50c. and $1.00; Golden Yellow, dark eye, trade pkt. 50c. and $1.00. Send for price list for other varieties. Pansy Plants, ready September 1 to December 25, any size wanted, cold frame size 65c. per 100 by mail; $5.00 per 1000 by express; 5,000 $20. Large flowering plants $1.00 per 100; $8.00 per 1000. Cash with order.
ADDRESS E. B. JENNINGS,
WHOLESALE PANSY GROWER,
Lock box 254 SOUTHPORT, CONN.

ROEMER'S SUPERB PRIZE PANSIES
The finest strain of Pansies in the World.
Introducer and Grower of all the leading Novelties.
Catalogue free on application.
FRED. ROEMER, SEED GROWER,
QUEDLINBURG, GERMANY.

Phœnix rupicola.
This useful and beautiful Date Palm in EXTRA FINE PLANTS, growing in from 7 to 10-inch pots, from $3.50 to $7.50 each, according to size.
EDWIN LONSDALE, Wyndmoor,
STATION "G," PHILADELPHIA.
(Chestnut Hill P. O.)

EXTRA PANSY SEED.
Mammoth Sunbeam Strain.
A grand collection of giant flowering varieties, very large, of perfect form, and choice colors; carefully selected; receive high praise from my customers; better than ever; no finer strain offered anywhere. Every florist should sow of it. Trade pkt., 500 seeds, 25 cts.; 3 pkts. 60 cts.; 6 pkts. $1.00.
JOHN F. RUPP, Shiremanstown, Pa.

Premium American
PANSY • SEEDS.
New Crop.
Grown by WM. TOOLE, Baraboo, Wisconsin, has the largest collection in America.
"GUIDE TO PANSY CULTURE,"
with catalogue describing 82 varieties and mixtures. Extra choice mixed 10c pkt.; trade pkt. 20c; ⅛-oz. 50c. Selected mixed, pkt. 15c; trade pkt. 30c; ⅛-oz. 75c.
HESPERIAN PANSIES, pkt. 25c; trade pkt. 50c.
WM. TOOLE, Pansy Specialist,
BARABOO, WISCONSIN.

PANSIES.
During the season we shall have plants of best German strain of Pansies, at lowest prices.
BRAUER & RICHTER,
McCONNELSVILLE, OHIO.

PANSIES! PANSIES!
Pansies grown from extra selected seed, flowers of immense size and fine color, are cheap at 65c. per 100 and $5 per 1,000 fine plants, for sale from Sept 1 to Dec 1.
Terms cash, money order office, Lancaster, Pa.
ELMER J. WEAVER, Ronka, Lane Co., Pa.

PANSIES.
Fresh Seed of my carefully selected strain of Pansies. Trade pkt. (1000 seeds), 50c. Plants ready in September.
ADOLF STAHL, Johnstown, Pa.

PANSIES WORTH RAISING.
Unsurpassed for brilliancy of colors and designs, and of vigorous growth, selling at an enormous rate in the market of New York (as high as 5000 plants per day in the proper season, at an average price of 6c. to 7c. per plant at wholesale). No florist should be without them, and the sooner he gets them the better he will be off.
NEW CROP SEED, raised by me with great care, may be had at $1.00 per package of about 2000 seeds; 5 packages (about ½ oz.) for $4.00.
— CASH WITH ORDER. —
Plants may be had later. HERE IS A CHANCE.
CHR. SOLTAU,
199 Grant Avenue JERSEY CITY, N. J.

Cape Flowers, new crop in best white quality at $1.00 the lb.; 10 lb. lots, $9 net.

Cycas Leaves (Sago Palms), natural prepared, equal to fresh cut in appearance, from 28-in. upwards, at 40c., 45c., 50c., 60c., 75c. and $1.00 each, according to length.

Metal Designs, Wreaths, Crosses, Anchors, etc. in the latest French styles, from 50 cents net apiece upwards.

Baskets of all styles, Plain and Fancy, for School Commencements, Dinners, Receptions, Favors, etc.

Supplies of all kinds, such as Bouquet Papers, Wax Paper, Foil, Immortelles, Letters, Wire Designs, Funeral Sheaves, Doves, etc. For prices consult our

Trade Catalogue, mailed free.

August Rölker & Sons,
136 & 138 W. 24th St., P. O. Station E. **New York.**

WHITE DOVES
FOR FLORISTS.

Largest and finest stock in the United States. Write for prices to

S. J. RUSSELL,
850 Montgomery St., Jersey City, N. J.

FOR SALE BY Messrs. F. E. McAllister, A. Herrmann, N. Steffens and Reed & Keller, New York; W. C. Krick, Brooklyn, N. Y.; H. Bayersdorfer & Co., Ernst Kaufmann and Marschuetz & Co., Philadelphia, Pa.; C. Ellisam & Sons, Trenton, N. J.; J. M. McCullough's Sons and B. P. Critchell & Co., Cincinnati, O.; J. C. Vaughan, Chicago, Ill.; Wisconsin Flower Exchange and Currie Bros., Milwaukee, Wis.; C. A. Kuehn, S. Mount & Co., C. Young & Sons Co., Wm Ellison and Jordan Floral Co., St. Louis, Mo.; Ed. S. Schmid, Washington, D. C.; G. W. Currey & Co. and Eckhardt & Co., Nashville, Tenn.; T. W. Wood & Sons, Richmond, Va.; U. J. Virgin, New Orleans, La.; D. B. Long, Buffalo, N. Y.; F. C. Huntington & Co., Indianapolis, Ind.; J. A. Simmers, Toronto, Ont.

Mention American Florist.

H. BAYERSDORFER & CO.,
WHOLESALE
FLORISTS' SUPPLIES ONLY,
56 N. 4th Street,
PHILADELPHIA, PA.

Our new Catalogue is now out, free upon application.

MARSCHUETZ & CO.,
Florists' Supplies,
23 & 25 N. 4th St., PHILADELPHIA, PA.
Send for Catalogue.

ERNST KAUFMANN & CO.,
Florists' Supplies,
113 NORTH 4TH STREET,
PHILADELPHIA, PA.

Kills Mildew and Fungus Growth. What does? **GRAPE DUST.**
Sold by Seedsmen.

H. M. HOOKER COMPANY,

57 and 59 W. Randolph Street, CHICAGO,

NATURAL GAS MADE GLASS

FOR GREENHOUSES.

Write for latest prices.

FRENCH GLASS For **CONSERVATORIES, ROSE HOUSES, Etc. Etc.**

VANHORNE, GRIFFEN & CO.,
Importers of PLATE and WINDOW GLASS. Manufacturers of BENT GLASS and FRENCH MIRRORS.

131-133-135-137 FRANKLIN STREET, **NEW YORK.**
Note—Imported Glass is used in the best grade of Greenhouse building.

The Summer Tours

of the MICHIGAN CENTRAL, "The Niagara Falls Route," are unrivalled in their variety, picturesqueness and comfort, embracing the best routes to Petoskey, Mackinac Island and Michigan Resorts, Niagara Falls, Thousand Islands and the St. Lawrence River, the Adirondacks, Green and White Mountains, Canadian Lakes and the New England Sea Coast.

A copy will be sent upon application to

MR. L. D. HEUSNER,
City Pass'r and Ticket Agent,
NO. 67 CLARK STREET, CHICAGO.

This is "THE FLORISTS LINE" to the World's Fair.

CUTS!

Wood Engraving,
Zinc Etching,
Half-Tone,
Wax Engraving, Photo-Engraving,
Designing.

MANZ & CO.,
183 Monroe Street, CHICAGO. **ENGRAVERS.**
Mention American Florist.

THE WABASH

. . . WILL BE THE . . .

"FLORISTS LINE"
TO THE **ST. LOUIS**
CONVENTION, as well as returning.

Write F. A. PALMER, Gen'l Pass. Agt., 201 Clark Street, CHICAGO.

It is expected a party will be made up leaving Chicago about August 7.

THE GREAT ANTIPEST.
For particulars, see next week.
R. W. CARMAN, GEN'L AGT.,
291 Amity Street, FLUSHING, Queens Co., N. Y.

TO TAKE PLACE OF WIND MILLS

HOT AIR PUMPING ENGINES

A Windmill

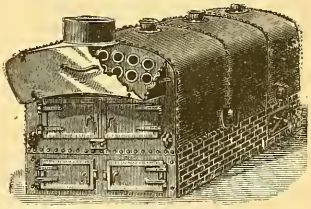
is unreliable because it depends upon the elements for its power; hydraulic rams also depend upon favorable conditions and waste as much water as they secure. Steam pumps require skill and hand pumps demand labor and time. The

DE LAMATER-RIDER OR DE LAMATER-ERICSSON Hot-Air Pumping Engines

are especially designed for pumping water, and from shallow streams or any kind of well. They are simple, safe and reliable, require no steam and have no valves. They require very little heat to operate them, and can be arranged for any kind of fuel.

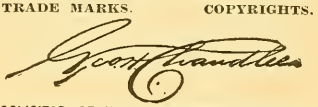
Send for illustrated catalogue to
THE DE LAMATER IRON WORKS,
87 South Fifth Av.,
NEW YORK, N. Y.

KROESCHELL BROS.
IMPROVED
Greenhouse × Boiler,
41 to 55 Erie St., CHICAGO.



Boilers made of the best of material, shell, firebox sheets and heads of steel, water space all around front, sides and back). Write for information

TRADE MARKS. COPYRIGHTS.



SOLICITOR OF U. S. AND FOREIGN PATENTS,
Atlantic Building, Washington, D. C.
(Send sketch or model for free examination as to patentability.)

ALWAYS mention the AMERICAN FLORIST when writing to advertisers.

Ailantus glandulosa.

Superintendent W. R. Smith of the Washington Botanic Garden says that Ailantus glandulosa is of all trees the tree for narrow streets. Its large foliaceous development keeps it vigorous and healthy. The only objection to it is the unpleasant fragrance of the flowers. This can be entirely avoided by treating the tree as a pollard, as is the custom in Paris. It never flowers, because of the pruning.

The law made by congress against its being planted in Washington was owing to the influence, we believe, of a well written article by Mr. Downing. Don Piatt was, perhaps, the last to dare the law and plant one of these trees in the aristocratic quarter of Washington. His keen sarcasm, which found expression in his paper known as The Capitol, prevented the authorities from interfering with him, presumably.

Society of American Florists.

Members whose dues for 1892 remain unpaid are reminded that arrearages must be paid up before they will be entitled to any of the privileges of membership for current year.

All parties desiring space in the trade exhibit should make prompt application to Mr. E. H. Michel, Magnolia and Tower Grove Aves., St. Louis, who is superintendent of this department.

Those wishing to secure hotel accommodations in advance should address Mr. R. F. Tesson, West Forest Park, St. Louis. WM. J. STEWART, Sec'y.

LANCASTER, PA.—Geo. W. Schroyer is replacing one of his old houses by a modern structure 125x40.

EVANS' IMPROVED
CHALLENGE VENTILATING APPARATUS
Write for Illustrated Catalogue.
QUAKER CITY MACHINE WORKS, Richmond, Ind.

FLORISTS' HOSE,
Made by E. W. Holt, member of the Society of American Florists.
Goodyear Rubber Store,
2 W. 14TH ST. NEW YORK.

Lawn Vases.
THE LARGEST IN THE MARKET FOR THE MONEY.
17x20-inch .....price $1.00.
17x34-inch, with base, price $1.75.
20x22-inch.. .....price $1.50.
20x22-inch, with base, price $2.25.
Send for our price list of Standard Flower Pots, Plain and Fancy Vases, etc., etc. Terms cash f. o. b.
HILFINGER BROS. POTTERY, Ft. Edward, N. Y.

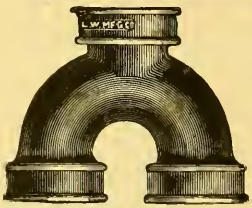
IMPROVED GLAZING.
Zinc Joints for putting glass without laps. No leakage. No sliding of glass. Practically air tight. Keeps out cold winds, thereby saving fuel. No laps, saves enough glass to pay for the zincs. No breakage of glass on account of frost or ice. Some of the largest growers in the country are using "Gasser's Patent Zinc Joints" with entire satisfaction.
Write for sample and price list.
J. M. GASSER, FLORIST,
101 Euclid Ave., CLEVELAND, O.

D. H. ROBERTS,
159 & 161 South Fifth Ave., New York.
NATURAL GAS MADE GLASS,
for Rose Houses, Conservatories, etc., etc.
Look at our World's Fair Exhibit in Horticultural Building.

Mention American Florist.

THE "LOCKLAND"
Sash Bars
ARE ALWAYS SATISFACTORY.
This cut represents our improved Clipper Bar for Butted Glass roof—putty to be used under glass only.
GUTTER MATERIAL, RIDGES, SASH, ETC.
The finest CLEAR CYPRESS used.
Write for circulars and estimates.
LOCKLAND LUMBER CO.
Lockland, O.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.
Pipe can be easily put together by any one, very little instruction being needed.
GET THE BEST!
Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.
Mention American Florist.
L. WOLFF MFG. CO., 93 to 117 W. Lake Street, CHICAGO.
WRITE FOR ILLUSTRATED CIRCULAR.

"Standard" Flower Pots.
As manufactured by us have carried off highest honors wherever shown and have stood the best test. They are used in all the leading floral establishments in the United States. For prices address
The Whilldin Pottery Company,
BRANCH WAREHOUSES: 713, 715, 717 & 719 Wharton St., Philadelphia, Pa.
Randolph Ave. and Union St., Jersey City, N. J.
Jackson Ave. and Pearson St., Long Island City, L. I.

STANDARD FLOWER POTS.
Every user of Flower Pots should correspond with us before purchasing elsewhere, our facilities are unequalled.
A. H. HEWS & CO., N. Cambridge, Mass.

Standard Flower Pots.
We wish to notify the trade that this summer we have made great improvements in machinery and have also discovered a better clay, so that we are now manufacturing FLOWER POTS that can't be beat. We have the assurance of a host of our customers, that our make are the best in the market. Bear in mind that freight rates are very low from this point, and we claim that our way of packing saves you freight charges. Send for circulars, or we will send you figures on any quantity you want.
SIPFLE, DOPFFEL & CO., SYRACUSE, N. Y.

The FAIRBANKS

GALVANIZED

STEEL

Wind MILLS AND TOWERS

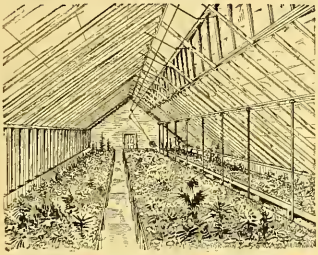
Are WARRANTED to be as well made, of as good material, and to produce more power than any other steel mill made.

THE ECLIPSE WIND MILL
the Original Self-regulating Wood Wheel.

Pumps, Tanks, &c. Send for Catalogue and Prices.

Fairbanks, Morse & Co., Chicago, Ill.

THE CHAMPION



Automatic Ventilator.

The cheapest, easiest to operate, and by far the best machine in the market. Don't buy a Ventilator until you have seen my illustrated descriptive circular, which will be sent you free, giving prices, etc. Also Champion Soil Pulverizer and Sifter.

Address, **E. E. WOLF,**
Box 114. SPRINGFIELD, O.

HERE WE ARE AGAIN.

Send on your orders for Sash Bars and Ventilating Sash. All kinds on hand.

PROMPT ATTENTION.

Itemized Estimates given, and cost of freight guaran eed.

CORRESPONDENCE SOLICITED.

Clear Cypress,

from bottom gutter up is my specialty.

Lyman Felheim,
ERIE, PA.

THE PERFECT DRAINAGE

BENCH TILE

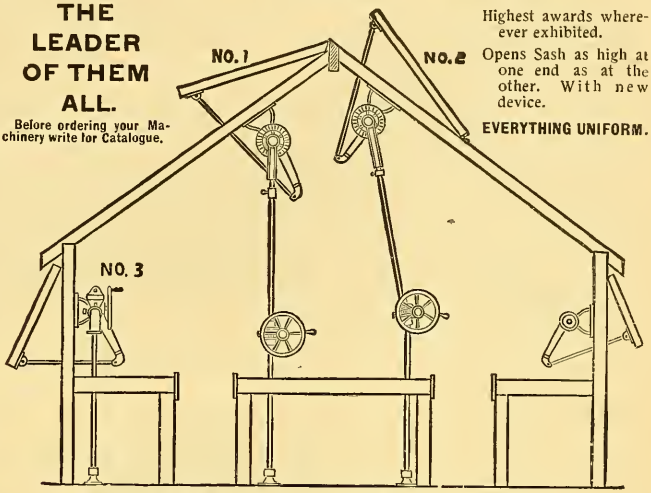
For circulars, etc., address

W. P. Wight, Upland Green Houses,
Send your business card. MADISON, N. J.

STANDARD VENTILATING MACHINERY,

THE LEADER OF THEM ALL.

Before ordering your Machinery write for Catalogue.

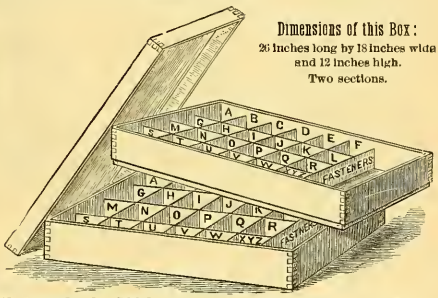


Highest awards wherever exhibited.

Opens Sash as high at one end as at the other. With new device.

EVERYTHING UNIFORM.

E. HIPPARD, YOUNGSTOWN, OHIO.



Dimensions of this Box: 26 inches long by 18 inches wide and 12 inches high. Two sections.

With an order for 500 letters, we furnish a box made of wood nicely stained and varnished, such as is represented in the cut.

BOSTON FLORIST LETTER CO.

Manufacture THE BEST LETTERS IN THE MARKET.

Sizes 1½-in. and 2-in. 2.00 per 100. Patent fastener with each letter.

OUR NEW SCRIPT LETTER, $4.00 per 100.

N. F. McCARTHY, Treas. & Mangr. | Address 13 Green St., **Boston, Mass.**

Address all correspondence to 1 Music Hall Place.

We have a new FASTENER which we consider a decided success. Any customers having old style fasteners which they wish to exchange, can do so without additional cost by writing us.

AGENTS.

Marschnetz & Co., 25 N. 4th St., Phila.,
A. Kolker & Sons, New York.
F. E. McAllister, 22 Dey St., New York.
A. D. Perry & Co., 33 Warren St., Syracuse, New York.
Ernst Kaufmann & Co., 113 N. 4th St., Phila.
H. Bayersdorfer & Co., Philadelphia, Pa.
A. C. Kendal, 115 Ontario St., Cleveland, O.
J. A. Simmers, Toronto, Ont. Agent for Canada.
E. H. Hunt, 79 Lake St., Chicago, Ill.
Wisconsin Flower Exchange, 131 Mason St., Milwaukee, Wis.
H. Sunderbruch, 4th and Walnut Sts., Cincinnati, O
T. W. Wood & Sons, 6th and Marshall Sts. Richmond, Va.
Jas. Vick's Sons, Rochester, N. Y.
C. A. Kuehn, 1122 Pine St., St. Louis, Mo,
D. B. Long, Buffalo, New York.
C. F. Huntington & Co., Indianapolis, Ind.

These Letters are handled by all the Wholesalers in Boston.

J. N. STRUCK & BRO.

Manufacturers of

• CYPRESS •

Greenhouse Material,

LOUISVILLE, KY.

Mention American Florist.

STANDARD HOSE MENDER.

The only Mender using ordinary galvanized wire No. 14, instead of expensive bands. Any person can handle it with perfect ease. Thousands in use and all testify to its Wonderful Merits.

Sample Box, by Mail, 50 cts.

E. HIPPARD, Youngstown, Ohio.

You will benefit the American Florist by mentioning it every time you write an advertiser in these columns.

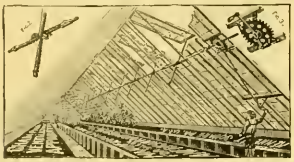
Crude Oil for Fuel.

In reply to K, about crude oil for fuel, crude oil is largely used in Detroit. There are several burners here that work all right for a while but soon clog up or burn out. The only ones that last, so far as used here, are for steam boilers. We figure that two and a half to three barrels of oil will do the work of one ton of coal. There seems to be very little difference what kind of coal is used. There is very little smell as we use it; we bury our oil tank, use water pressure to drive out the oil, and if the combustion is perfect there is almost no smell at all. We have a large bakery here using it in their ovens; my idea is if people can eat bread and cakes from that bakery we ought to stand it in our greenhouses. Oil costs here about two cents per gallon delivered by the wagon load or one and one-half cents by the car. Hard coal costs about $4.75, and good soft coal about $2 to $2.50 by the car. We believe we make a saving of from 25 to 60 per cent over coal. Only one burner is used for each boiler whether large or small.

Woodmere, Mich. GUS. KNOCH.

WHEN YOU arrive in Chicago make it a point to at once register your name and hotel in the book kept for the purpose at the headquarters of the Chicago Florist Club, 45 Lake st.

SUCCESSFUL GROWERS
USE THE BEST VENTILATING APPLIANCES.



The Champion Ventilating Apparatus
cannot be equaled in point of
CHEAPNESS, DURABILITY OR EFFICIENCY.
Circular is yours for the asking. Address
AMERICAN ROAD MACHINE CO.,
. . . . Kennett Square, Pa.

GLASS
which is absolutely perfect for modern greenhouse construction.
ROCK BOTTOM PRICES.
Send for Estimate. Satisfaction Guaranteed
REED GLASS CO.
65 WARREN STREET and
46, 48, & 50 COLLEGE PLACE,
—NEW YORK CITY.—

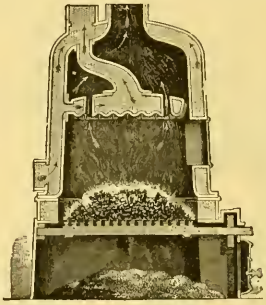
GREEN-HOUSE
HEATING,
MYERS & CO.
1518 & 1520 S. 9th St.,
PHILADELPHIA.
Send for catalogue and price list.

STOTT'S DISTRIBUTOR

Read Advertisement in next week's issu

LORD & BURNHAM CO.
Horticultural Architects and Builders,
STEAM AND HOT WATER HEATING ENGINEERS.
Plans and estimates furnished on application. . . . . .

Front view of a portion of our exhibit at the World's Fair.
. . . SEND FOUR CENTS POSTAGE FOR ILLUSTRATED CATALOGUE. . . .
LORD & BURNHAM CO., Irvington-on-Hudson, N. Y.



JOHN A. SCOLLAY,
74 & 76 MYRTLE AVE.,
BROOKLYN, N. Y.
GREENHOUSE HEATING
—AND—
Ventilating Apparatus.
Patentee and Manufacturer of
HOT WATER BOILERS,
GREENHOUSE PIPE,
PIPE FITTINGS,
VALVES, TANKS, ETC.
Estimates of cost given, and Illustrated Catalogue furnished on application.

"God helps those who help themselves." And he who uses THE "NEW DEPARTURE"

(MEAT SAW)
VENTILATING APPLIANCE,
helps himself and those who help him in his labors, and is therefore doubly blessed. Send for price and description.
J. D. CARMODY, Evansville, Ind.
Or call and see the man and machine at his greenhouse office, located on the lawn west front of Horticultural Building, World's Fair grounds, Chicago, Ill.

SMITH & WEBSTER,
MAKERS OF
GREENHOUSE PIPE
FOR HOT WATER AND STEAM,
193 Lake Street, - CHICAGO, ILL.

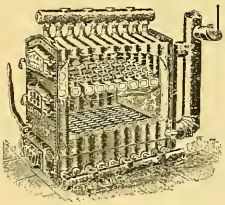
Send for a Copy OF OUR
TRADE DIRECTORY
AND REFERENCE BOOK.
PRICE $2.00.
AMERICAN FLORIST CO.,
P. O. Drawer 164. CHICAGO, ILL.

OUR
Sash Lifter AND Hinges
will do the work and cost you less than any other. Send your name and address and we will mail you description and price.
BAY STATE HARDWARE CO.
272 Freeport Street, BOSTON, MASS.

CHAS. B WEATHERED, PRES'T. EDMUND WEATHERED, VICE PRES'T. AND TREAS. SAMUEL BURNS, SEC'Y
INCORPORATED 1893.

Thos. W. Weathered's Sons,
HORTICULTURAL ARCHITECTS, & BUILDERS, AND HOT WATER ENGINEERS.
FACTORY: 196 to 240 Orient Ave. Jersey City, N.J.
244 Canal St.
NEW YORK.
CHICAGO OFFICE: 619-620 Manhattan Bldg.

ROYAL HEATERS
TRADE MARK
UTICA, N.Y.

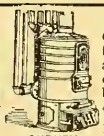


HART & CROUSE,
UTICA, N. Y.

FLORAL DESIGNS
The Cut Flower Worker's Friend. Fine book of 160 pages. Send $3.50 for it, to
J. HORACE McFARLAND, Harrisburg, Pa.

Mention the American Florist when writing to advertisers on this page.

Gurney


GURNEY

The marked superiority of the Gurney Heaters which is manifested in all severe trials, is now a matter of history. There is no question about their being the best. For reasons, see our book "*How Best to Heat Our Homes.*" It is free.

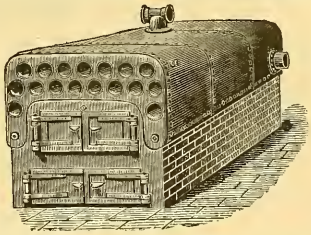
HOT WATER HEATERS AND RADIATORS FOR HEATING Dwellings, Public Buildings, Etc. BY HOT WATER CIRCULATION.

Gurney Hot Water Heater Co.
HEAD OFFICE: 163 Franklin St., Boston, Mass.
BRANCH OFFICE: 59 Wabash Ave., Chicago, Ill.
SELLING AGENCIES: Johnson & Co., 71 John St., New York. J. C. F. Trachsel, 246 Arch St., Philadelphia.

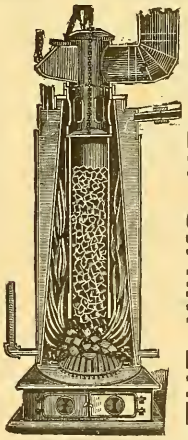
DOUBLE CROWN

ESTABLISHED 1866.
FLORISTS WIRE DESIGNS
MANUFACTURED BY
N. STEFFENS
335 EAST 21ST ST. NEW YORK.

ESTABLISHED 1854.
DEVINE'S BOILER WORKS.
THE FLAT TOP TYPE
Wrought Iron Hot Water Boilers



Capacity from 350 to 10,000 feet of four-inch pipe.
SEND FOR NEW LIST.
FRANK DAN BLISH, Att'y,
OFFICE, 189 STATE STREET.
WORKS, 56th & WALLACE STREETS.
CHICAGO.
Mention American Florist



THE WILKS HEATER FOR HEATING GREENHOUSES, STORES, DWELLINGS, ETC.
Manufactured THE S. WILKS MF'G CO. 123 S. Clinton St. CHICAGO, ILL.
SEND FOR CATALOGUE.

When writing to any of the advertisers on this page please mention the American Florist.

Index to Advertisers.

Abel C C & Co....1311 1312
Adv. Rates, etc 1308
American Boiler Co ..1320
American Road Mach Co.....1318
Anchorage Rose Co. ..1307
Baller F A. 1312
Barnard W W & Co...1311
Bay State Hdw Co ...1318
Bayersdorfer H & Co .1315
Berger H H & Co. 1310
Bonsall Jos E & Son ..1308
Boston Letter Co 1317
Brackenridge & Co....1310
Braner & Richter.....1314
Brown & Canfield . ..1307
Buckwell Albert 1320
Burns & Raynor.....1309
Burrow J G 1308 1314
Burton John..... 1314
Carman R W ... .1315
Carmody J D..... ..1318
Chandlee Geo F 1315
Corbrey T J 1309
Cox Seed & Plant Co..1311
Davidson A E. 1310
Davis R & Son. 1320
De Lamater Iron Wks1315
Devine's Boiler Wks..1319
Dillon J L.....1307
Dreer H A..... ... 1312
Elliott W H.....1308
Ellison Wm..... 1309
Ellwanger & Barry....1307
Ely Z De Forest & Co.1311
Fairbanks Morse & Co1317
Felheim Lyman.....1317
Field S B.....1306
Forstermann I. 1315
Gasser J M 1316
Gonzalez & Co..... 1310
Goodyear Rubber Store 1316
Grossman C M.....1312
Gurney Heater Co ...1319
Hall Ass'n 1320
Hammond Benj.....1315
Hancock Geo 1308
Hart James.....1309
Hart Michael A 1309
Hart & Crouse.....1319
Hartford H E.....1308
Heinl Jos.. 1309
Henion & Hubbell.....1320
Herr Albert M...1313 1314
Hews A H & Co 1316
Hilfinger Bros.....1316
Hill E G & Co.....1312
Hippard E 1317
Hitchings & Co.....1320
Hooker H M Co.....1315
Horan Edw C. 1309
Hulsebosch Bros 1311
Hunt E H.... 1309
Hunt M A.... 1310
Hunter & Purdy 1309
Jennings E B.....1314
Kaufmann Ernst & Co1315
Kemble Floral Co .. .1307
Kennicott Bros.... ..1309
Knapp O R.....1314
Koffman E 1308
Kroeschell Bros 1315
Knehn C A.....1309
Knyk K J 1312
La Roche & Stahl.....1308
Lockland Lumber Co..1318
Lombard R T 1308
Long Dan'l B.....1309
Lonsdale Edwin..1312 1314
Lord & Burnham Co..1318
McCarthy N F & Co...1309
McFarland J H.....1319
McFarland J H Co....1308
MacBean A S.....1307
Manz J & Co.....1315
Marschnetz & Co.....1315
Michel Plant & Bulb Co 1311
Millang Bros..... ... 1309
Miller Geo W.....1307
Moffatt G J.....1311
Moninger Jno C 1320
Moore Frank L.....1307
Myers & Co 1318
Niagara Falls Route..1315
Niles Centre Floral Co1309
Olson M 1309
Ouwerkerk P.....1312
Peck & Sutherland....1309
Pennock C J 1308
Pennock Sam'l S 1308
Pierson F R Co. 1307 1308 1312
Pochman Bros.....1309
Prince A G & Co 1309
Quaker City Mach Co.1316
Randall A L. 1309
Reed Glass Co 1318
Reimschneider Ernst.1311
Reuter S J.....1312
Richards C B & Co .. 1311
Roberts J H.....1316
Roehrs T. eo.....1309
Roemer Fred.... .. 1314
Rogers Nurseries.....1312
Rolker A & Sons 1315
Rupp John F.....1314
Russell S J.....1315
Sander & Co.....1312
Schneider Fred. 1314
Schulz Jacob. 1307
Scollay John A 1318
Shelmire W K.....1308
Sheridan W F.....1309
Sherwood Hall Nur Co1312
Siebrecht & Wadley...1312
Sipple, Doepfel & Co...1310
Situations, wants.....1306
Smith Nathan & Son..1314
Smith & Webster.....1318
Soltau Chr.....1314
Stahl Adolph 1314
Steffens N.....1319
Stoldt C.....1309
Storrs & Harrison Co.1307
Stott Garden Imp Co..1318
Strnek J N & Bro.....1317
Sunderbruch H L.....1309
Tesson R F.....1307
Toole Wm 1314
Tricker Wm.....1310
Van Coppenolle Ed...1312
Van Horne Griffen & Co 1315
Van Tubergen C G Jr.1311
Vaughan J C. 1310 1312
Wabash R R 1315
Weathered's Sons T W1319
Weaver Elmer J.....1314
Weeber & Dorr.....1311
Welch Bros.....1309
Whitldin Pot Co 1316
White John.....1307
Wight W F.....1317
Wilks S Mfg Co.....1319
Winter N D 1306
Wisconsin Flower Ex.1308
Wolf E E 1317
Wolff L Mfg Co.....1316
Wood Bros.....1307
Zirngebel D.....1314

THE AMERICAN FLORIST and *Gardening* together to one address for $1.75. Send orders to the American Florist Co.

500 SMILAX

AT 10 CENTS PER STRING.

R. DAVIS & SONS, MORRISON, ILL.

CYPRESS GREEN HOUSE MATERIAL

HOT BED AND VENTILATING SASH

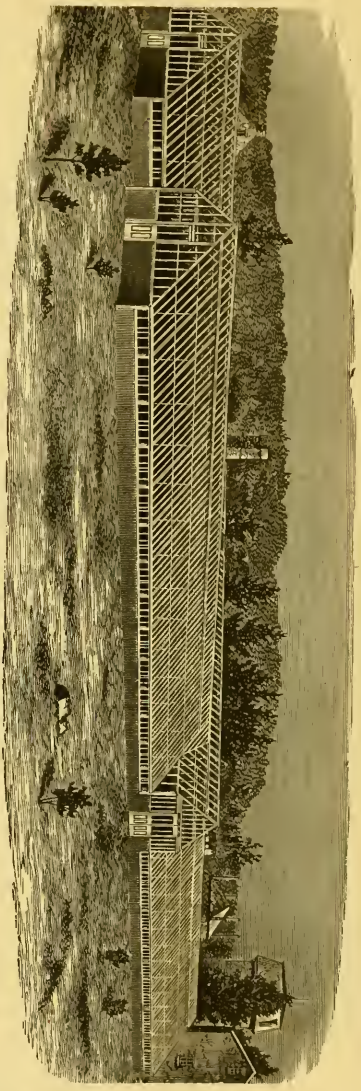
JOHN C. MONINGER,
297 Hawthorne Ave.,
CHICAGO, ILL.

HITCHINGS & CO.

ESTABLISHED 1844.

GREENHOUSE HEATING AND VENTILATING,

HORTICULTURAL ARCHITECTURE AND BUILDING.



COMMERCIAL ROSE AND GREENHOUSES, CONSERVATORIES, PALM HOUSES, ETC., CONSTRUCTED WITH POSTS, RAFTERS, PURLINS, GUTTERS, SILLS, COLUMNS AND BRACKETS, ALL OF IRON; AND GLAZING BARS, VENTILATING SASH AND SIDING OF WOOD. ERECTED COMPLETE, OR THE STRUCTURAL IRON WORK SHIPPED READY FOR ERECTION WITH PLANS, DETAILS AND FULL INSTRUCTIONS TO ENABLE LOCAL MECHANICS TO COMPLETE THE SAME. ——) IRON BENCH FRAMES FOR SLATE OR WOOD TOPS. (——

SEND 4 CENTS POSTAGE FOR ILLUSTRATED CATALOGUES.

HITCHINGS & CO., 233 Mercer Street, NEW YORK.

STEAM · AND · HOT · WATER · HEATERS

FOR

GREENHOUSE HEATING

156

DIFFERENT SIZES.

American Boiler Company.

BOSTON, 195 Ft. Hill Square. NEW YORK, 94 Center St. CHICAGO, 34-36 Dearborn St. DENVER, Mining Exchange Bldg. SAN FRANCISC 80 Crocker Bldg.

VICTOR SPRAY PUMP.
The most wonderful pump ever invented. Requires no foot-rest or support. Send for prices.
HENION & HUBBELL, 55 N. Clinton St., Chicago, Ill.

HAIL LOCK THE DOOR BEFORE THE HORSE IS STOLEN. DO IT NOW.
JOHN G. ESLER, Sec'y F. H. A., Saddle River, N. J.